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ABSTRACT

This document, which reflects Mississippi's statutory requirement that instructional programs be based on core curricula and performance-based assessment, contains outlines of the instructional units required in local instructional management plans and daily lesson plans for agriculture business and management (ABM) I and II. Presented first are a program description and course outlines. Section I contains curriculum frameworks for both courses, and section II contains outlines of the instructional units required in each course. Units in ABM I are as follows: introduction and orientation, recordkeeping and planning, equipment management and safety, animal science and management, plant science and management, conservation practices, structure of agricultural business, marketing, agricultural credit, and budgets. Units in ABM II are as follows: orientation; human relations; agricultural communications; agricultural salesmanship; agricultural business procedures; agricultural advertising and display; taxes, insurance, and business law; agricultural marketing; facilities and equipment management and repair; and property acquisition. Each unit includes suggested time on tasks, competencies and objectives, teaching strategies, assessment strategies, and resources. Recommended tools and equipment are listed in section III. Appended are lists of related academic topics and workplace skills for the 21st century and student competency profiles for both courses. (YLB)

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Mississippi Curriculum Framework for Agriculture Business and Management

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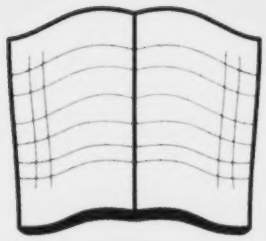

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1995

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MISSISSIPPI

CURRICULUM FRAMEWORK

FOR

AGRICULTURE BUSINESS AND MANAGEMENT

(Program CIP: 01.0101 - Agriculture Business & Mgmt., Gen.)

SECONDARY PROGRAMS 1995

August 1, 1995

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FOREWORD

The courses in this document reflect the following statutory requirements as found in Section 37-3-49, Mississippi Code of 1972, as amended:

> The State Department of Education shall provide an instructional program and establish guidelines and procedures for managing such programs in the public schools as part of the State Program of Educational Accountability and Assessment of Performance. . .
>
> The department shall provide that such program or guidelines . . . are enforced through the performance-based accreditation system.
>
> The local school board must adopt the objectives that will form the core curriculum that will be systematically delivered throughout the district.
>
> Standards for student performance must be established for each core objective in the local program and those standards establish the district's definition of mastery for each objective.
>
> There shall be an annual review of student performance in the instructional program against locally established standards.

Each secondary vocational-technical course consists of a series of instructional units which focus on a common theme. All units have been written using a common format which includes the following components:

- Unit Number and Title
- Suggested Time on Task - The number of days of instruction that should be required to teach the competencies and objectives of the unit. For secondary occupational programs, a "day" represents a two-period block of instruction.
- Competencies and Suggested Objectives
  - A **Competency** represents a general concept of performance that students are expected to master as a requirement for satisfactorily completing a unit. Students will be expected to receive instruction on all competencies in the curriculum framework.
  - The **Suggested Objectives** represent the enabling and supporting knowledge and performances that will indicate mastery of the competency.
- Suggested Teaching Strategies - This section of each unit indicates strategies that can be used to enable students to master each suggested objective. Teachers should feel free to modify or enhance these suggestions based on needs of their students and resources available in order to provide optimum learning experiences for their students.

- Suggested Assessment Strategies - This section indicates strategies that can be used to measure student mastery. Examples of suggested strategies could include classroom discussions, laboratory exercises, and student assignments. Again, teachers should feel free to modify or enhance these suggested assessment strategies based on local needs and resources.
- Suggested Resources - This section indicates some of the primary instructional resources that may be used to teach the competencies and suggested objectives. Again, these resources are suggested and the list may be modified or enhanced based on needs and abilities of students and on available resources.

The following guidelines were used in developing the curriculum framework in this document and should be considered in developing local instructional management plans and daily lesson plans:

- The content of the courses in this document reflects approximately 75 percent of the time allocated to each course. For a one-year course, this means that the content of the existing units of instruction should represent approximately 135 days of instruction. The remaining 25 percent of each course should be developed at the local district level and may reflect:
  - Additional units of instruction within the course related to topics not found in the state framework.
  - Activities which develop a higher level of mastery on the existing competencies and suggested objectives.
  - Activities and instruction related to new technologies and concepts that were not prevalent at the time the current framework was developed/revised.
  - Activities which implement components of the Mississippi Tech Prep Initiative, including integration of academic and vocational-technical skills and coursework, school-to-work transition activities, and articulation of secondary and postsecondary vocational-technical programs.
  - Individualized learning activities, including work site learning activities, to better prepare individuals in the courses for their chosen occupational area.

- Sequencing of the units of instruction within a course is left to the discretion of the local district. Naturally, foundation units related to topics such as safety, tool and equipment usage, and other fundamental skills should be taught first. Other units related to specific skill areas in the course, however, may be sequenced to take advantage of seasonal and climatic conditions, resources located outside of the school, and other factors.

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August 1, 1995

PROGRAM DESCRIPTION

AGRICULTURE BUSINESS AND MANAGEMENT
(Program CIP: 01.0101 - Agriculture Business & Mgmt., Gen.)

Agriculture Business and Management is an instructional program that generally prepares individuals to apply the economic and business principles involved in the organization, operation, and management of farm and agricultural business. These concepts are taught through applications such as the Supervised Agricultural Experience Program; FFA Contests and Proficiency Awards Programs; and Agricultural Planning and Production Project.

August 1, 1995

COURSE OUTLINE

AGRICULTURE BUSINESS AND MANAGEMENT I

Unit No.	Unit Title	No. of Days
Unit 1	Introduction and Orientation	5
Unit 2	Record Keeping and Planning	30
Unit 3	Equipment Management and Safety	25
Unit 4	Animal Science and Management	20
Unit 5	Plant Science and Management	20
Unit 6	Conservation Practices	10
Unit 7	Structure of Agricultural Business	5
Unit 8	Marketing	5
Unit 9	Agricultural Credit	5
Unit 10	Budgets	10

AGRICULTURE BUSINESS AND MANAGEMENT II

Unit No.	Unit Title	No. of Days
Unit 1	Orientation	5
Unit 2	Human Relations	5
Unit 3	Agricultural Communications	15
Unit 4	Agricultural Salesmanship	10
Unit 5	Agricultural Business Procedures	10
Unit 6	Agricultural Advertising and Display	20
Unit 7	Taxes, Insurance, and Business Law	20
Unit 8	Agricultural Marketing	10
Unit 9	Facilities and Equipment Maintenance and Repair	10
Unit 10	Property Acquisition	10

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August 1, 1995

SECTION I:

CURRICULUM FRAMEWORK

FOR

AGRICULTURE BUSINESS AND MANAGEMENT

CURRICULUM FRAMEWORK

Course Name: Agriculture Business and Management I

Course CIP Code: 01.0101

Course Description: Agriculture Business and Management I is the entry level course of the secondary Agriculture Business and Management program. Students in Agriculture Business and Management I will gain foundation competencies related to careers in agricultural business, FFA/leadership activities, record keeping and planning, equipment management and safety, animal science and management, plant science and management, conservation practices, structure of agricultural business, marketing, agricultural credit, and budgets. (2-2½ Carnegie Units, depending upon time spent in the course)

Competencies and Suggested Objectives:

1. Describe vocational student organization activities that relate to and support the instructional program.
   a. Identify vocational student organization activities supporting the instructional program.
   b. Determine what procedures are needed to participate in vocational student organization activities.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP6
2. Compile information on careers in Agricultural Business and Management.
   a. Identify career opportunities in Agricultural Business and Management.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   Workplace Skills (See Appendix B):
   WP1, WP2, WP6
3. Apply leadership skills needed in the Agricultural Business and Management field.
   a. Demonstrate leadership skills in speaking.
   b. Demonstrate leadership skills in conducting a meeting using "Roberts Rules of Order."

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6
4. Apply computer skills.
   a. Demonstrate the use of word processing.

b. Demonstrate the use of spreadsheets.

Related Academic Topics (See Appendix A):

C1, C2, C3, C4, C5

M1, M2, M7

Workplace Skills (See Appendix B):

WP1, WP2, WP4, WP6

5. Develop mathematical skills.
   a. Demonstrate mathematical concepts involved in adding, subtracting, multiplying, and dividing fractions and whole numbers.
   b. Demonstrate mathematical concepts in measuring.

   Related Academic Topics (See Appendix A):

   C1, C2, C3, C4, C6

   M1, M2, M7

   Workplace Skills (See Appendix B):

   WP1, WP2, WP7
6. Apply record keeping skills.
   a. Demonstrate record keeping skills involved in selecting, planning, and implementing a Supervised Agricultural Experience Program (SAE).
   b. Assist students to utilize record keeping procedures throughout the course.

   Related Academic Topics (See Appendix A):

   C1, C2, C3, C4, C5

   M1, M2, M7

   Workplace Skills (See Appendix B):

   WP1, WP2, WP4, WP6
7. Apply proper safety procedures with tools, equipment, and hazardous materials.
   a. Identify proper safety procedures with tools, equipment, and hazardous materials.
   b. Demonstrate proper safety procedures with tools, equipment, and hazardous materials.

   Related Academic Topics (See Appendix A):

   C1, C2, C3, C4

   Workplace Skills (See Appendix B):

   WP1, WP2, WP3
8. Select and utilize proper equipment for a specific job.
   a. Identify equipment for a specific job.
   b. Demonstrate correct procedures for use of selected hand and power tools.

   Related Academic Topics (See Appendix A):

   C1, C2, C3, C4

   Workplace Skills (See Appendix B):

   WP1, WP2, WP3
9. Develop a bill of materials for a specific job.
   a. Identify the components of a bill of materials.
   b. Prepare a bill of materials.

Related Academic Topics (See Appendix A):
C1, C2, C3, C4, C5
M1, M4, M7
Workplace Skills (See Appendix B):
WP1, WP2, WP4, WP6

10. Apply procedures for maintaining and storing equipment.
    a. Perform procedures for maintaining equipment.
    b. Perform procedures for storing equipment.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4
    Workplace Skills (See Appendix B):
    WP1, WP2, WP3
11. Select proper animal for specific farm enterprise.
    a. Identify types of animals for use in beef, dairy, swine, poultry, sheep, horses, and aquaculture enterprises.
    b. Describe characteristics of breeds of livestock used in beef, dairy, swine, poultry, sheep, horses, and aquaculture enterprises.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4,C5
    S3, S7, S8
    Workplace Skills (See Appendix B):
    WP2, WP4, WP6
12. Develop knowledge of nutrition in livestock production.
    a. Identify terms related to animal nutrition.
    b. Identify sources of nutrient groups and their functions.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5
    M1, M7
    Workplace Skills (See Appendix B):
    WP1, WP2, WP4, WP6
13. Apply management practices for maintaining animal health.
    a. Determine management practices for maintaining animal health.
    b. Determine causes and treatment of disease and parasites.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5
    M1, M7
    Workplace Skills (See Appendix B):
    WP1, WP2, WP4, WP6
14. Explain livestock reproduction.
    a. Define terms associated with livestock reproduction.
    b. Compare the differences in estrus cycles and gestation periods of livestock.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5
    M1, M3, M8

Workplace Skills (See Appendix B):
WP1, WP2, WP4, WP6

15. Categorize the classes of agricultural plants.
    a. Classify plants by life cycle.
    b. Identify parts of plants.
    c. Describe functions of plant parts.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5
    S2, S8

    Workplace Skills (See Appendix B):
    WP, WP1, WP2, WP4, WP6

16. Determine plant nutrients needed for proper growth.
    a. Identify the primary and secondary plant nutrients.
    b. Determine amounts and kinds of fertilizer needed for proper plant growth.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5
    M7
    S8

    Workplace Skills (See Appendix B):
    WP1, WP2, WP4, WP6

17. Describe common groups of plant pests and diseases and methods of control.
    a. Identify common groups of plant pests.
    b. Identify common groups of plant diseases.
    c. Determine methods of plant pest control.
    d. Determine methods of plant disease control.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5
    S2, S8

    Workplace Skills (See Appendix B):
    WP1, WP2, WP5, WP6

18. Describe the factors which affect soil formation.
    a. Identify factors which affect soil formation including climate, weather, slope, and drainage.
    b. Classify soil condition by sand, silt, and clay particles.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5
    S4, S8

    Workplace Skills (See Appendix B):
    WP1, WP2, WP4, WP6

19. Contrast types of soil erosion and control.
    a. Identify the types of soil erosion and their control.
    b. Identify factors that determine land capability class as related to erosion.

Related Academic Topics (See Appendix A):
C1, C2, C3, C4, C5
S4, S8
Workplace Skills (See Appendix B):
WP1, WP2, WP4, WP6

20. Describe point sources of pollution.
    a. Identify procedures for protecting the water table.

Related Academic Topics (See Appendix A):
C1, C2, C3, C4, C5
S4, S8
Workplace Skills (See Appendix B):
WP1, WP2, WP4, WP6

21. Describe the different types of business organizations, their advantages, and their disadvantages.
    a. Identify the different types of business organizations including sole proprietorship, partnership, corporate, and cooperative.
    b. Compare the advantages and disadvantages of business organizations.

Related Academic Topics (See Appendix A):
C1, C2, C4, C5
Workplace Skills (See Appendix B):
WP1, WP4, WP6

22. Analyze principles of a partnership agreement.
    a. Explain the principles of a partnership agreement.
    b. Describe a local business partnership.

Related Academic Topics (See Appendix A):
C1, C2, C4, C5
Workplace Skills (See Appendix B):
WP 1, WP4, WP6

23. Differentiate between retail and wholesale marketing.
    a. Identify retail and wholesale marketing.
    b. Identify retail and wholesale outlets in the community.

Related Academic Topics (See Appendix A):
C1, C2, C3, C4, C5
M1, M4, M6, M7
Workplace Skills (See Appendix B):
WP1, WP2, WP4, WP5, WP6

24. Identify factors that affect pricing.
    a. Describe the law of supply and demand.
    b. Describe how income, population, customer preferences, competition, and expectations affect pricing.

Related Academic Topics (See Appendix A):
C1, C2, C3, C4, C5
M1, M4, M6, M7

Workplace Skills (See Appendix B):
WP1, WP2, WP4, WP5, WP6

25. Utilize an Agricultural Satellite Information System (ASIS).
    a. Identify terms and abbreviations associated with ASIS.
    b. Retrieve commodity trading prices, specific news items, and government reports.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5
    M1, M4, M6, M7
    Workplace Skills (See Appendix B):
    WP1, WP2, WP4, WP5, WP6
26. Describe the use, advantages, and disadvantages of agricultural credit.
    a. Identify the uses of agricultural credit.
    b. Identify the advantages and disadvantages of agricultural credit.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5
    Workplace Skills (See Appendix B):
    WP1, WP2, WP4, WP6
27. Determine established guidelines for credit rating and credit agreements.
    a. Identify the guidelines for credit ratings.
    b. Identify the various credit agreements and their guidelines.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5
    Workplace Skills (See Appendix B):
    WP1, WP2, WP4, WP6
28. Describe credit agencies and their sources of credit.
    a. Identify local credit agencies and their operational procedures.
    b. Identify alternative sources of farm credit.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5
    Workplace Skills (See Appendix B):
    WP1, WP2, WP4, WP6
29. Explain budgeting and determine reasons for budgeting.
    a. Define budgeting.
    b. Determine significant reasons for budgeting.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5
    M1, M2, M7
    Workplace Skills (See Appendix B):
    WP1, WP2, WP4, WP6
30. Develop an enterprise budget.
    a. Identify the parts of a budget.
    b. Develop a budget.

Related Academic Topics (See Appendix A):
C1, C2, C3, C4, C5
M1, M2, M7
Workplace Skills (See Appendix B):
WP1, WP2, WP4, WP6

31. Develop a strategy for using the ASIS in budgeting.
    a. Identify the information available and needed for budgeting on the ASIS.
    b. Retrieve information needed to develop an agricultural budget.

Related Academic Topics (See Appendix A):
C1, C2, C3, C4, C5
M1, M2, M7
Workplace Skills (See Appendix B):
WP1, WP2, WP4, WP6

CURRICULUM FRAMEWORK

Course Name: Agriculture Business and Management II

Course CIP Code: 01.0190

Course Description: Agriculture Business and Management II is the advanced level course of the secondary Agriculture Business and Management program. Students in Agriculture Business and Management II will gain foundation competencies related to careers in agricultural business; FFA/leadership activities; human relations; agricultural communications; agricultural salesmanship; agricultural business procedures; agricultural advertising and display; taxes, insurance and business law; agricultural marketing; equipment maintenance and repair; and property acquisition. (2-2½ Carnegie Units, depending upon time spent in the course)

Competencies and Suggested Objectives:

1. Examine the outlook for employment in the agribusiness and management field.
   a. Identify local agribusinesses.
   b. Identify employment opportunities.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6
2. Apply leadership skills needed in the agribusiness and management field.
   a. Describe the leadership skills required in the agribusiness and management field including public speaking and parliamentary procedures.
   b. Demonstrate the leadership skills needed in the agribusiness and management field.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6
3. Describe the importance of human relations skills.
   a. Identify positive personality traits.
   b. Demonstrate positive personality traits.
   c. Utilize human relation skills throughout the course.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6

4. Distinguish between an agribusiness employee's success and failure as a result of human relations skills.
   a. Identify skills and personality traits which determine success and failure.
   b. Demonstrate personality traits which determine success and failure.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6
5. Analyze components of the skills of listening and answering questions.
   a. Describe the components of listening and answering questions.
   b. Demonstrate skills in listening and answering questions.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP6
6. Apply acceptable procedures for answering business telephones and taking messages in an agribusiness setting.
   a. Identify acceptable procedures for answering business telephones and taking messages.
   b. Demonstrate acceptable procedures for answering business telephones and taking messages.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP6
7. Apply the proper elements in developing a business letter.
   a. Identify the proper elements in developing a business letter.
   b. Write a business letter.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP6
8. Prepare a resume and an employment application form.
   a. Describe the components of a resume and an employment application form.
   b. Prepare a resume and an application form using a word processor.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP6
9. Prepare and present a 3-5 minute presentation related to an agribusiness topic.
   a. Describe the parts of a speech.
   b. Develop a speech outline and prepare a 3-5 minute presentation related to an agribusiness topic.
   c. Present a 3-5 minute presentation related to an agribusiness topic.

Related Academic Topics (See Appendix A):
C1, C2, C3, C4, C5, C6
Workplace Skills (See Appendix B):
WP1, WP2, WP3, WP5, WP6

10. Apply different approaches to the potential customer.
    a. Describe various approaches to the potential customer.
    b. Demonstrate various approaches to the potential customer.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C6
    Workplace Skills (See Appendix B):
    WP1, WP2, WP3, WP4, WP6
11. Demonstrate a sales presentation of agribusiness supplies and/or products.
    a. Describe the steps to give a sales presentation of agribusiness supplies and/or products.
    b. Give a sales presentation of agribusiness supplies and/or products.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C6
    Workplace Skills (See Appendix B):
    WP1, WP2, WP3, WP4, WP6
12. Practice procedures for overcoming customer resistance.
    a. Determine ways to overcome customer resistance.
    b. Demonstrate procedures for overcoming customer resistance.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C6
    Workplace Skills (See Appendix B):
    WP1, WP2, WP3, WP4, WP6
13. Apply procedures for closing a sale.
    a. Explain the procedures to close a sale.
    b. Demonstrate procedures for closing a sale.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C6
    Workplace Skills (See Appendix B):
    WP1, WP2, WP3, WP4, WP6
14. Apply procedures for making customer transactions.
    a. Identify different business procedures which are used in customer transactions.
    b. Demonstrate procedures for making customer transactions.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C6
    M1, M7
    Workplace Skills (See Appendix B):
    WP1, WP2, WP3, WP4, WP6

15. Describe how inventory is managed and how the selling price of merchandise is determined.
    a. Describe how inventory is managed and how the selling price of merchandise is determined including physical replacement, labor, freight charges, wholesale costs, overhead, and loss/waste.
    b. Prepare an inventory by using a computer spreadsheet.

    Related Academic Topics (See Appendix A):
    C1, C2, C5
    M1, M7

    Workplace Skills (See Appendix B):
    WP1, WP2, WP4
16. Utilize business machines.
    a. Describe the function of business machines in agribusiness.
    b. Demonstrate use of business machines including calculators, cash registers, and computers.

    Related Academic Topics (See Appendix A):
    C1, C2, C5
    M1, M7

    Workplace Skills (See Appendix B):
    WP1, WP2, WP4, WP6
17. Explain methods of agricultural promotions.
    a. Describe methods of promotions as related to agriculture including advertisements, displays, radio, ASIS, and television.
    b. Identify agricultural promotions being used in advertisements, displays, radio, and television in the community.

    Related Academic Topics (See Appendix A):
    C1,C2, C3,C4, C6

    Workplace Skills (See Appendix B):
    WP2, WP3, WP3, WP4, WP6
18. Explain how advertising is used in agribusiness.
    a. Describe how advertising is used in agribusiness including source of information, to persuade, and to remind.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C6

    Workplace Skills (See Appendix B):
    WP1, WP2, WP3, WP4, WP6
19. Explain types of advertising media used by agribusiness including newspapers, television, display, magazines, and flyers.
    a. Describe types of advertising media used by agribusiness including newspapers, television, display, magazines, and flyers.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C6

Workplace Skills (See Appendix B):
WP1, WP2, WP3, WP4, WP6

20. Design and prepare an agribusiness display and advertisement.
    a. Describe the components in designing and preparing an agribusiness advertisement.
    b. Design and prepare an agribusiness display and advertisement.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C6
    Workplace Skills (See Appendix B):
    WP1, WP2, WP3, WP4, WP6
21. Prepare tax forms.
    a. Describe the forms and elements of preparation for income tax forms.
    b. Complete tax returns.

    Related Academic Topics (See Appendix A):
    C1, C2, C4, C6
    M1, M7
    Workplace Skills (See Appendix B):
    WP1, WP2, WP4, WP6
22. Explain the responsibilities of the agribusiness employer concerning social security.
    a. Describe types of social security benefits.
    b. Identify responsibilities of the agribusiness employer concerning social security.

    Related Academic Topics (See Appendix A):
    C1, C2, C5
    M1, M7
    Workplace Skills (See Appendix B):
    WP1, WP2, WP4, WP6
23. Explain the kinds of insurance with coverage needed in an individual operation.
    a. Compare the common kinds of insurance and coverages including life, property, health, and liability.
    b. Determine the insurance needs of an individual operator including life, property, health, and liability.

    Related Academic Topics (See Appendix A):
    C1, C2, C5
    M1, M7
    Workplace Skills (See Appendix B):
    WP1, WP2, WP4, WP6
24. Explain the essential elements of a contract and associate laws and other regulations affecting agribusiness activities.
    a. Identify the essential elements of a contract including offer and acceptance, consideration, legal parties, and unlawful practices.

b. Associate laws and regulations affecting agribusiness activities including negligence, workman's compensation, estate planning, and other regulations.

Related Academic Topics (See Appendix A):

C1, C2, C5

M1, M7

Workplace Skills (See Appendix B):

WP1, WP2, WP4, WP6

25. Explain general uses of futures contracts in marketing agricultural products, crops, and livestock.
    a. Describe the function of a futures contract.
    b. Describe the function of a futures contract option.

Related Academic Topics (See Appendix A):

C1, C2, C3, C4, C5

M1, M7

Workplace Skills (See Appendix B):

WP1, WP2, WP4, WP5, WP6

26. Apply ASIS in explaining how futures contract prices related to cash market prices.
    a. Define the relationship between cash and futures prices (basis).
    b. Track the price fluctuations for a particular commodity through a six-week period, futures prices vs. cash prices.

Related Academic Topics (See Appendix A):

C1, C2, C3, C4, C5

M1, M7

Workplace Skills (See Appendix B):

WP1, WP2, WP4, WP5, WP6

27. Apply proper safety procedures.
    a. Describe proper safety procedures with hand tools, power tools, and equipment.
    b. Demonstrate proper safety procedures with hand tools, power tools, and equipment.

Related Academic Topics (See Appendix A):

C1, C2, C3, C4

M1, M7

Workplace Skills (See Appendix B):

WP1, WP2, WP5, WP6

28. Apply procedures of welding with electric arc and oxyacetylene welding equipment.
    a. Identify and/or construct various welds using electric arc welding equipment.
    b. Identify and/or construct various welds using oxyacetylene welding equipment.

Related Academic Topics (See Appendix A):
C1, C2, C3, C4
M1, M7
Workplace Skills (See Appendix B):
WP1, WP2, WP5, WP6

29. Apply procedures to service and troubleshoot small gasoline engines.
    a. Describe procedures to service and troubleshoot a small gasoline engine.
    b. Demonstrate procedures to service and troubleshoot small gasoline engines.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4
    M1, M7
    Workplace Skills (See Appendix B):
    WP1, WP2, WP5, WP6
30. Apply procedures to make electrical repairs.
    a. Describe procedures to make electrical repairs.
    b. Demonstrate procedures to make electrical repairs.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4
    M1, M7
    Workplace Skills (See Appendix B):
    WP1, WP2, WP5, WP6
31. Apply procedures to make plumbing repairs.
    a. Describe the procedures to make plumbing repairs.
    b. Demonstrate the procedures to make plumbing repairs.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4
    M1, M7
    Workplace Skills (See Appendix B):
    WP1, WP2, WP5, WP6
32. Apply procedures to make structural repairs.
    a. Describe the procedures to make structural repairs.
    b. Demonstrate the procedures to make structural repairs.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4
    M1, M7
    Workplace Skills (See Appendix B):
    WP1, WP2, WP5, WP6
33. Explain the approaches to acquiring property.
    a. Identify the approaches to acquiring property including inheritance, purchasing, and leasing.
    b. Describe the approaches to acquiring property including inheritance, purchasing, and leasing.
    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5, C6

Workplace Skills (See Appendix B):
WP1, WP2, WP3, WP6

34. Explain the factors to consider in lease agreements.
    a. Identify the factors to consider in lease agreements.
    b. Describe the factors to consider in lease agreements including crop-share and cash lease.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5, C6
    Workplace Skills (See Appendix B):
    WP1, WP2, WP3, WP6
35. Explain the system used in establishing the legal description of land.
    a. Describe the system used to establish the legal description of land.
    b. Interpret the legal description of a tract of land including section, township, and range.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5, C6
    Workplace Skills (See Appendix B):
    WP1, WP2, WP3, WP6
36. Utilize concepts of land surveying.
    a. Identify the principles of land surveying.
    b. Demonstrate land surveying by running lines according to a land description.

    Related Academic Topics (See Appendix A):
    C1, C2, C3, C4, C5, C6
    Workplace Skills (See Appendix B):
    WP1, WP2, WP3, WP4, WP6

SECTION II:

CURRICULUM GUIDE

FOR

AGRICULTURE BUSINESS AND MANAGEMENT

August 1, 1995

AGRICULTURE BUSINESS AND MANAGEMENT I

AGRICULTURE BUSINESS AND MANAGEMENT I
UNIT 1: INTRODUCTION AND ORIENTATION (5 days)

Competencies and Suggested Objectives:

1. Describe vocational student organization activities that relate to and support the instructional program.
   a. Identify vocational student organization activities supporting the instructional program.
   b. Determine what procedures are needed to participate in vocational student organization activities.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP6
2. Compile information on careers in Agricultural Business and Management.
   a. Identify career opportunities in Agricultural Business and Management.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5

   Workplace Skills (See Appendix B):
   WP1, WP2, WP6
3. Apply leadership skills needed in the Agricultural Business and Management field.
   a. Demonstrate leadership skills in speaking.
   b. Demonstrate leadership skills in conducting a meeting using "Roberts Rules of Order."

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5, C6

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6

Suggested Teaching Strategies:

1. *Describe vocational student organization activities that relate to and support the instructional program.*
   a. Discussion about national, state, and local FFA organization.
   b. Discussion about FFA contests, awards programs, and degree program.
2. *Compile information on careers in Agricultural Business and Management.*
   a. Oral and written report on career opportunities in Agricultural Business and Management.

3. *Apply leadership skills needed in the Agricultural Business and Management field.*
   a. *Present an oral report on leadership skills in speaking.*
   b. *Conduct a meeting where items of business are discussed.*

Suggested Assessment Strategies:

1. *Describe vocational student organization activities that relate to and support the instructional program.*
   a. *Test - Vocational student organization activities supporting the instructional program.*
   b. *Assignment - Determine what are procedures are needed to participate in vocational student organization activities.*
2. *Compile information on careers in Agricultural Business and Management.*
   a. *Test - Identify career opportunities in Agricultural Business and Management.*
3. *Apply leadership skills needed in the Agricultural Business and Management field.*
   a. *Performance Activity - Demonstrate leadership skills in 3-5 minute public speech.*
   b. *Performance Activity - Demonstrate leadership skills in conducting a meeting.*

Suggested References:

Instructional Materials Service. (Catalog #1050) Exploring Career Opportunities in Agriculture Handbook. College Station, TX: Texas A&M University.

National FFA Organization. FFA Manual. Alexandria, VA: Author. 1995.

Patton, B. and Harp, K. Vocational Agriculture I. Stillwater, OK: Oklahoma Department of Vocational and Technical Education. 1984.

Smith, Marcellus et al. Careers in Agribusiness and Industry (4th ed.). Danville, IL: Interstate Printers and Publishers. 1991.

AGRICULTURE BUSINESS AND MANAGEMENT I
UNIT 2: RECORD KEEPING AND PLANNING (30 days)

Competencies and Suggested Objectives:

1. Apply computer skills.
   a. Demonstrate the use of word processing.
   b. Demonstrate the use of spreadsheets.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M1, M2, M7
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
2. Develop mathematical skills.
   a. Demonstrate mathematical concepts involved in adding, subtracting, multiplying, and dividing fractions and whole numbers.
   b. Demonstrate mathematical concepts in measuring.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6
   M1, M2, M7
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
3. Apply record keeping skills.
   a. Demonstrate record keeping skills involved in selecting, planning, and implementing a Supervised Agricultural Experience Program (SAE).
   b. Assist students to utilize record keeping procedures throughout the course.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M1, M2, M7
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6

Suggested Teaching Strategies:

1. *Apply computer skills.*
   a. Prepare a report using word processing software.
   b. Prepare a table using spreadsheet software.
2. *Develop mathematical skills.*
   a. Perform an assignment requiring adding, subtracting, multiplying, and dividing fractions and whole numbers.
   b. Perform a measuring assignment.

3. *Apply record keeping skills.*
   a. *Develop an SAE Program; participate in an Agricultural Planning Project and in FFA contest and awards programs.*
   b. *Utilize record keeping procedures throughout the course.*

Suggested Assessment Strategies:

1. *Apply computer skills.*
   a. *Performance Activity - Demonstrate the use of word processing.*
   b. *Performance Activity - Demonstrate the use of spreadsheets.*
2. *Develop mathematical skills.*
   a. *Assignment - Demonstrate mathematical concepts involved in adding, subtracting, multiplying, and dividing fractions and whole numbers.*
   b. *Performance Activity - Demonstrate mathematical concepts in measuring.*
3. *Apply record keeping skills.*
   a. *Assignment - Demonstrate record keeping skills involved in selecting, planning, and implementing an SAE.*
   b. *Monitor record keeping procedures throughout the course.*

Suggested References:

Dictation Disc Company. Computer Applications for Business. New York, NY: Author. 1990.

McCully, Jimmy. Basic Vocational Education - Section IIIB - Introduction to Agricultural Skills. Mississippi State: Research and Curriculum Unit. 1987.

National Council for Agricultural Education. Decisions and Dollars. Alexandria, VA: Author. 1995.

National FFA Organization. FFA Proficiency Award and Degree Software. Alexandria, VA: Author. Current edition.

Stewart, Jim and Jobes, Raleigh. Farm and Ranch Business Management (3rd ed.). Moline, IL: Deere and Company. 1992.

AGRICULTURE BUSINESS AND MANAGEMENT I
UNIT 3: EQUIPMENT MANAGEMENT AND SAFETY (25 days)

Competencies and Suggested Objectives:

1. Apply proper safety procedures with tools, equipment, and hazardous materials.
   a. Identify proper safety procedures with tools, equipment, and hazardous materials.
   b. Demonstrate proper safety procedures with tools, equipment, and hazardous materials.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4,

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3
2. Select and utilize proper equipment for a specific job.
   a. Identify equipment for a specific job.
   b. Demonstrate correct procedures for use of selected hand and power tools.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4,

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3
3. Develop a bill of materials for a specific job.
   a. Identify the components of a bill of materials.
   b. Prepare a bill of materials.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M1, M4, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
4. Apply procedures for maintaining and storing equipment.
   a. Perform procedures for maintaining equipment.
   b. Perform procedures for storing equipment.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3

Suggested Teaching Strategies:

1. *Apply proper safety procedures with tools, equipment, and hazardous materials.*

   a. *Discussion and demonstration of safety procedures with tools, equipment, and hazardous materials.*
   b. *Perform practical exercises of safety procedures with tools, equipment, and hazardous materials.*
2. *Select and utilize proper equipment for a specific job.*
   a. *Use visual aids to identify equipment.*
   b. *Perform practical exercises with hand and power tools.*
3. *Develop a bill of materials for a specific job.*
   a. *Provide examples of a bill of materials.*
   b. *Performance exercises to prepare a bill of materials.*
4. *Apply procedures for maintaining and storing equipment.*
   a. *Perform exercise for maintaining equipment.*
   b. *Perform exercise for storing equipment.*

Suggested Assessment Strategies:

1. *Apply proper safety procedures with tools, equipment, and hazardous materials.*
   a. *Test - Identify proper safety procedures with tools, equipment, and hazardous materials.*
   b. *Performance Activity - Demonstrate proper safety procedures with tools, equipment, and hazardous materials.*
2. *Select and utilize proper equipment for a specific job.*
   a. *Test - Identify equipment for a specific job.*
   b. *Performance Activity - Demonstrate correct procedures for use of selected hand and power tools.*
3. *Develop a bill of materials for a specific job.*
   a. *Test - Identify the components of a bill of materials.*
   b. *Assignment - Prepare a bill of materials.*
4. *Apply procedures for maintaining and storing equipment.*
   a. *Performance Activity - Maintain equipment.*
   b. *Performance Activity - Store equipment.*

Suggested References:

Harp, K. and Stewart, J. Vocational Agriculture II. Stillwater, OK: Oklahoma State Department of Vocational and Technical Education. 1985.

Parady, H. and Turner, H. Tractor Maintenance - Principles and Procedures. Athens, GA: AAVIM. 1975.

Reeder, D. Vocational Agriculture IV. Stillwater, OK: Oklahoma State Department of Vocational and Technical Education. 1979.

Turner, H. Safe Tractor Operation and Daily Care. Athens, GA: AAVIM. 1975.

AGRICULTURE BUSINESS AND MANAGEMENT I
UNIT 4: ANIMAL SCIENCE AND MANAGEMENT **(20 days)**

Competencies and Suggested Objectives:

1. Select proper animal for specific farm enterprise.
   a. Identify types of animals for use in beef, dairy, swine, poultry, sheep, horses, and aquaculture enterprises.
   b. Describe characteristics of breeds of livestock used in beef, dairy, swine, poultry, sheep, horses, and aquaculture enterprises.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   S3, S7, S8

   Workplace Skills (See Appendix B):
   WP2, WP4, WP6
2. Develop knowledge of nutrition in livestock production.
   a. Identify terms related to animal nutrition.
   b. Identify sources of nutrient groups and their functions.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
3. Apply management practices for maintaining animal health.
   a. Determine management practices for maintaining animal health.
   b. Determine causes and treatment of disease and parasites.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
4. Explain livestock reproduction.
   a. Define terms associated with livestock reproduction.
   b. Compare the differences in estrus cycles and gestation periods of livestock.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M1, M3, M8

   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6

Suggested Teaching Strategies:

1. *Select proper animal for specific farm enterprise.*
   a. *Use visual aids to show on types of animals for use in beef, dairy, swine, poultry, sheep, horses, and aquaculture enterprises. Participate in and prepare animals for livestock shows and sales.*
   b. *Use visual aids and conduct field trips to study characteristics of breeds of livestock used in beef, dairy, swine, poultry, sheep, horses, and aquaculture enterprises. Participate in Agricultural Planning Project.*
2. *Develop knowledge of nutrition in livestock production.*
   a. *Discussion and visual aids of terms related to animal nutrition.*
   b. *Student report on sources of nutrient groups and their functions.*
3. *Apply management practices for maintaining animal health.*
   a. *Prepare animal health management program.*
   b. *Observe symptoms and study causes and treatment of disease and parasites.*
4. *Explain livestock reproduction.*
   a. *Discussion and media on terms associated with livestock reproduction.*
   b. *Assist students to compare the differences in estrus cycles and gestation periods of livestock.*

Suggested Assessment Strategies:

1. *Select proper animal for specific farm enterprise.*
   a. *Test - Identify types of animals for use in beef, dairy, swine, poultry, sheep, horses, and aquaculture enterprises.*
   b. *Test - Describe characteristics of breeds of livestock used in beef, dairy, swine, poultry, sheep, horses, and aquaculture enterprises.*
2. *Develop knowledge of nutrition in livestock production.*
   a. *Test - Identify terms related to animal nutrition.*
   b. *Test - Identify sources of nutrient groups and their functions.*
3. *Apply management practices for maintaining animal health.*
   a. *Assignment - Determine management practices for maintaining animal health.*
   b. *Assignment - Determine causes and treatment of disease and parasites.*
4. *Explain livestock reproduction.*
   a. *Test - Define terms associated with livestock reproduction.*
   b. *Assignment - Compare the differences in estrus cycles and gestation periods of livestock.*

Suggested References:

Harp, K. and Stewart, J. Vocational Agriculture II. Stillwater, OK: Oklahoma State Department of Vocational and Technical Education. 1985.

McCully, J. A Reference Unit on Basic Principles of Animal Science. Mississippi State: Research and Curriculum Unit. 1976.

AGRICULTURE BUSINESS AND MANAGEMENT I
UNIT 5: PLANT SCIENCE AND MANAGEMENT **(20 days)**

Competencies and Suggested Objectives:

1. Categorize the classes of agricultural plants.
   a. Classify plants by life cycle.
   b. Identify parts of plants.
   c. Describe functions of plant parts.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   S2, S8
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
2. Determine plant nutrients needed for proper growth.
   a. Identify the primary and secondary plant nutrients.
   b. Determine amounts and kinds of fertilizer needed for proper plant growth.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M7
   S8
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
3. Describe common groups of plant pests and diseases and methods of control.
   a. Identify common groups of plant pests.
   b. Identify common groups of plant diseases.
   c. Determine methods of plant pest control.
   d. Determine methods of plant disease control.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   S2, S8
   Workplace Skills (See Appendix B):
   WP1, WP2, WP5, WP6

Suggested Teaching Strategies:

1. *Categorize the classes of agricultural plants.*
   a. Use plant production projects to observe and classify plants by life cycle.
   b. Use media to observe parts of plants.
   c. Use assignments to study functions of plant parts.
2. *Determine plant nutrients needed for proper growth.*
   a. Use media to study the primary and secondary plant nutrients.

   b. *Performance exercises in agricultural planning project to determine amounts and kinds of fertilizer needed for proper plant growth.*
3. *Describe common groups of plant pests and diseases and methods of control.*
   a. *Field trips to greenhouse and field crops to observe common groups of plant pests.*
   b. *Field trips to greenhouse and field crops to observe common groups of plant diseases.*
   c. *Prepare recommendations of methods of plant pest control.*
   d. *Prepare recommendations of methods of plant disease control.*

Suggested Assessment Strategies:

1. *Categorize the classes of agricultural plants.*
   a. *Assignment - Classify plants by life cycle.*
   b. *Test - Identify parts of plants.*
   c. *Test - Describe functions of plant parts.*
2. *Determine plant nutrients needed for proper growth.*
   a. *Test - Identify the primary and secondary plant nutrients.*
   b. *Performance Activity - Determine amounts and kinds of fertilizer needed for proper plant growth.*
3. *Describe common groups of plant pests and diseases and methods of control.*
   a. *Test - Identify common groups of plant pests.*
   b. *Test - Identify common groups of plant diseases.*
   c. *Assignment - Determine methods of plant pest control.*
   d. *Assignment - Determine methods of plant disease control.*

Suggested References:

Harp, K. and Stewart, J. Vocational Agriculture II. Stillwater, OK: Oklahoma State Department of Vocational and Technical Education. 1985.

Instructional Materials Service. Agricultural Science and Technology: Agriscience 333. (Catalog #8846). College Station, TX: Texas A&M.

AGRICULTURE BUSINESS AND MANAGEMENT I
UNIT 6: CONSERVATION PRACTICES (10 days)

Competencies and Suggested Objectives:

1. Describe the factors which affect soil formation.
   a. Identify factors which affect soil formation including climate, weather, slope, and drainage.
   b. Classify soil condition by sand, silt, and clay particles.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   S4, S8
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
2. Contrast types of soil erosion and control.
   a. Identify the types of soil erosion and their control.
   b. Identify factors that determine land capability class as related to erosion.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   S4, S8
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
3. *Describe point sources of pollution.*
   a. Identify procedures for protecting the water table.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   S4, S8
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6

Suggested Teaching Strategies:

1. *Describe the factors which affect soil formation.*
   a. Agricultural planning project, resource persons from USDA National Resources Conservation Service (NRCS), and field trips to study factors affecting soil formation.
   b. Participate in FFA Soil Judging Contests.
2. *Contrast types of soil erosion and control.*
   a. Use media to identify the types of soil erosion and their control.
   b. Participate in FFA Soil Judging Contests.
3. *Describe point sources of pollution.*
   a. Discussion and media to identify procedures for protecting the water table.

Suggested Assessment Strategies:

1. *Describe the factors which affect soil formation.*
   a. *Test - Identify factors which affect soil formation including climate, weather, slope, and drainage.*
   b. *Assignment - Participate in FFA Land Judging Contests.*
2. *Contrast types of soil erosion and control.*
   a. *Test - Identify the types of soil erosion and their control.*
   b. *Assignment - Participate in FFA Land Judging Contests.*
3. *Describe point sources of pollution.*
   a. *Test - Identify procedures for protecting the water table.*

Suggested References:

Harp, K. and Stewart, J. Vocational Agriculture II. Stillwater, OK: Oklahoma State Department of Vocational and Technical Education. 1985.

Instructional Materials Service. Agricultural Science and Technology: Agriscience 333. (Catalog #8846). College Station, TX: Texas A&M.

Instructional Materials Service. Curriculum Guide for Agriscience 384: Environmental Technology. (Catalog #CG384). College Station, TX: Texas A&M.

AGRICULTURE BUSINESS AND MANAGEMENT I
UNIT 7: STRUCTURE OF AGRICULTURAL BUSINESS (5 days)

Competencies and Suggested Objectives:

1. Describe the different types of business organizations, their advantages, and their disadvantages.
   a. Identify the different types of business organizations including sole proprietorship, partnership, corporate, and cooperative.
   b. Compare the advantages and disadvantages of business organizations.
   Related Academic Topics (See Appendix A):
   C1, C2, C4, C5
   Workplace Skills (See Appendix B):
   WP1, WP4, WP6
2. Analyze principles of a partnership agreement.
   a. Explain the principles of a partnership agreement.
   b. Describe a local business partnership.
   Related Academic Topics (See Appendix A):
   C1, C2, C4, C5
   Workplace Skills (See Appendix B):
   WP1, WP4, WP6

Suggested Teaching Strategies:

1. *Describe the different types of business organizations, their advantages, and their disadvantages.*
   a. *Use agricultural planning project and guest speaker to analyze types of business organizations, their advantages, and their disadvantages.*
   b. *Use agricultural planning project and SAE Program to evaluate types of business organizations, their advantages, and their disadvantages.*
2. *Analyze principles of a partnership agreement.*
   a. *Use agricultural planning project and SAE Program to analyze principles of a partnership agreement.*
   b. *Prepare a report of a successful local business partnership.*

Suggested Assessment Strategies:

1. *Describe the different types of business organizations their advantages, and their disadvantages.*
   a. *Test - Identify the different types of business organizations including sole proprietorship, partnership, corporate, and cooperative.*
   b. *Assignment - Compare the advantages and disadvantages of business organizations.*

2. *Analyze principles of a partnership agreement.*
   a. *Test - Explain the principles of a partnership agreement.*
   b. *Assignment - Describe a local business partnership.*

Suggested References:

Newman, M. and Wills, W. Agribusiness Management and Entrepreneurship (3rd ed.). Danville, IL: Interstate Printers and Publishers. 1994.

Kay, R. D. and Edwards, W. Economics of Resources, Agriculture, and Food: Series in Agricultural Economics. New York, NY: McGraw-Hill. 1994.

National Council for Agricultural Education. Decisions and Dollars. Alexandria, VA: Author. 1995.

Stewart, J. and Jobes, R. Farm and Ranch Business Management (3rd ed.). Moline, IL: Deere and Company. 1992.

AGRICULTURE BUSINESS AND MANAGEMENT I
UNIT 8: MARKETING (5 days)

Competencies and Suggested Objectives:

1. Differentiate between retail and wholesale marketing.
   a. Identify retail and wholesale marketing.
   b. Identify retail and wholesale outlets in the community.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M1, M4, M6, M7
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP5, WP6
2. Identify factors that affect pricing.
   a. Describe the law of supply and demand.
   b. Describe how income, population, customer preferences, competition, and expectations affect pricing
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M1, M4, M6, M7
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP5, WP6
3. Utilize an Agricultural Satellite Information System (ASIS).
   a. Identify terms and abbreviations associated with ASIS.
   b. Retrieve commodity trading prices, specific news items, and government reports.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M1, M4, M6, M7
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP5, WP6

Suggested Teaching Strategies:

1. *Differentiate between retail and wholesale marketing.*
   a. *Agricultural planning project, FFA Proficiency Awards Programs, and ASIS to differentiate between retail and wholesale marketing.*
   b. *Prepare report of retail and wholesale outlets in the community.*
2. *Identify factors that affect pricing.*
   a. *Discussion and media regarding the law of supply and demand.*
   b. *Prepare report on how income, population, customer preferences, competition, and expectations affect pricing.*
3. *Utilize an Agricultural Satellite Information System (ASIS).*

a. *Discussion with guest speaker on terms, abbreviations, and procedures associated with ASIS.*
b. *Use ASIS to retrieve commodity trading prices, specific news items, and government reports for use in agricultural planning project.*

Suggested Assessment Strategies:

1. *Differentiate between retail and wholesale marketing.*
   a. *Test - Identify components of retail and wholesale marketing organizations.*
   b. *Assignment - Identify retail and wholesale outlets in the community.*
2. *Identify factors that affect pricing.*
   a. *Test - Describe the law of supply and demand.*
   b. *Assignment - Describe how income, population, customer preferences, competition, and expectations affect pricing.*
3. *Utilize an Agricultural Satellite Information System (ASIS).*
   a. *Test - Identify terms and abbreviations associated with ASIS.*
   b. *Performance Activity - Retrieve commodity trading prices, specific news items, and government reports.*

Suggested References:

Instructional Materials Service. Agribusiness Management and Marketing: Agriscience 311. (Catalog #8720). College Station, TX: Texas A&M.

Luening, R. et al. The Farm Management Handbook (7th ed.). Danville, IL: Interstate. 1991.

National Council for Agricultural Education. Decisions and Dollars. Alexandria, VA: Author. 1995.

Stewart, J. and Jobes, R. Farm and Ranch Business Management (3rd ed.). Moline, IL: Deere and Company. 1992.

AGRICULTURE BUSINESS AND MANAGEMENT I
UNIT 9: AGRICULTURAL CREDIT **(5 days)**

Competencies and Suggested Objectives:

1. Describe the use, advantages, and disadvantages of agricultural credit.
   a. Identify the uses of agricultural credit.
   b. Identify the advantages and disadvantages of agricultural credit.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
2. Determine established guidelines for credit rating and credit agreements.
   a. Identify the guidelines for credit ratings.
   b. Identify the various credit agreements and their guidelines.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
3. Describe credit agencies and their sources of credit.
   a. Identify local credit agencies and their operational procedures.
   b. Identify alternative sources of farm credit.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6

Suggested Teaching Strategies:

1. *Describe the use, advantages, and disadvantages of agricultural credit.*
   a. *Use agricultural planning project and the Supervised Agricultural Experience to determine the uses of agricultural credit.*
   b. *Discussion with guest speaker and media regarding the advantages and disadvantages of agricultural credit.*
2. *Determine established guidelines for credit rating and credit agreements.*
   a. *Provide examples of credit reports for study of guidelines for credit rating.*
   b. *Discussion with guest speaker and media to study the various credit agreements and their guidelines.*
3. *Describe credit agencies and their sources of credit.*
   a. *Prepare report of local credit agencies and their operational procedures.*
   b. *Use agricultural planning project and the Supervised Agricultural Experience to determine alternative sources of farm credit.*

Suggested Assessment Strategies:

1. *Describe the use, advantages, and disadvantages of agricultural credit.*
   a. *Test - Identify the uses of agricultural credit.*
   b. *Test - Identify the advantages and disadvantages of agricultural credit.*
2. *Determine established guidelines for credit rating and credit agreements.*
   a. *Test - Identify the guidelines for credit ratings.*
   b. *Test - Identify the various credit agreements and their guidelines.*
3. *Describe credit agencies and their sources of credit.*
   a. *Assignment - Identify local credit agencies and their operational procedures.*
   b. *Assignment - Identify alternative sources of farm credit.*

Suggested References:

Harp, K. and Stewart, J. Vocational Agriculture II. Stillwater, OK: Oklahoma State Department of Vocational and Technical Education. 1985.

Instructional Materials Service. Agribusiness Management and Marketing: Agriscience 311. (Catalog #8720). College Station, TX: Texas A&M.

Instructional Materials Service. Advanced Agribusiness Management and Marketing: Agriscience 311H. (Catalog #8735). College Station, TX: Texas A&M.

Kay, R. D. and Edwards, W. Farm Management (3rd ed.). New York, NY: McGraw-Hill. 1994.

Luening, R. et al. The Farm Management Handbook (7th ed.). Danville, IL: Interstate. 1991.

National Council for Agricultural Education. Decisions and Dollars. Alexandria, VA: Author. 1995.

AGRICULTURE BUSINESS AND MANAGEMENT I
UNIT 10: BUDGETS **(10 days)**

Competencies and Suggested Objectives:

1. Explain budgeting and determine reasons for budgeting.
   a. Define budgeting.
   b. Determine significant reasons for budgeting.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M1, M2, M7
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
2. Develop an enterprise budget.
   a. Identify the parts of a budget.
   b. Develop a budget.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M1, M2, M7
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
3. Develop a strategy for using the ASIS in budgeting.
   a. Identify the information available and needed for budgeting on the ASIS.
   b. Retrieve information needed to develop an agricultural budget.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M1, M2, M7
   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6

Suggested Teaching Strategies:

1. *Explain budgeting and determine reasons for budgeting.*
   a. Discussion with resource person on budgeting.
   b. Discussion with resource person on budgeting.
2. *Develop an enterprise budget.*
   a. Discussion with resource person on budgeting.
   b. Develop a budget using agricultural planning project, SAE Program, and ASIS.
3. *Develop a strategy for using the ASIS in budgeting.*
   a. Report on the information available and needed for budgeting on the ASIS.
   b. Prepare a budget using information retrieved from ASIS.

Suggested Assessment Strategies:

1. *Explain budgeting and determine reasons for budgeting.*
   a. *Test - Define budgeting.*
   b. *Assignment - Determine significant reasons for budgeting.*
2. *Develop an enterprise budget.*
   a. *Test - Identify the parts of a budget.*
   b. *Performance Activity - Develop a budget.*
3. *Develop a strategy for using the ASIS in budgeting.*
   a. *Assignment - Identify the information available and needed for budgeting on the ASIS.*
   b. *Performance Activity - Retrieve information needed to develop an agricultural budget.*

Suggested References:

National Council for Agricultural Education. Decisions and Dollars. Alexandria, VA: Author. 1995.

Stewart, J. and Jobes, R. Farm and Ranch Business Management (3rd ed.). Moline, IL: Deere and Company. 1992.

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AGRICULTURE BUSINESS MANAGEMENT II

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AGRICULTURE BUSINESS AND MANAGEMENT II
UNIT 1: ORIENTATION **(5 days)**

Competencies and Suggested Objectives:

1. Examine the outlook for employment in the agribusiness and management field.
   a. Identify local agribusinesses.
   b. Identify employment opportunities.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6
2. Apply leadership skills needed in the agribusiness and management field.
   a. Describe the leadership skills required in the agribusiness and management field including public speaking and parliamentary procedures.
   b. Demonstrate the leadership skills needed in the agribusiness and management field.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6

Suggested Teaching Strategies:

1. *Examine the outlook for employment in the agribusiness and management field.*
   a. Discussion on procedures to identify local agribusinesses.
   b. Prepare report on employment opportunities in agribusiness and management.
2. *Apply leadership skills needed in the agribusiness and management field.*
   a. Discussion on the leadership skills required in the agribusiness and management field including public speaking and parliamentary procedures.
   b. Participate in FFA meetings and Contests and Awards Program.

Suggested Assessment Strategies:

1. *Examine the outlook for employment in the agribusiness and management field.*
   a. Test - Identify local agribusinesses.
   b. Assignment - Identify employment opportunities.

2. *Apply leadership skills needed in the agribusiness and management field.*
   a. *Test - Describe the leadership skills required in the agribusiness and management field including public speaking and parliamentary procedures.*
   b. *Performance Activity - Demonstrate the leadership skills needed in the agribusiness and management field.*

Suggested References:

Instructional Materials Service. Exploring Career Opportunities in Agriculture Handbook. Catalog #1050. College Station, TX: Texas A&M University.

Instructional Materials Service. Personal Skill Development in Agriculture: Agriscience 312. (Catalog #8746). College Station, TX: Texas A&M.

Lee, Jasper et al. Agricultural Marketing. Danville, IL: Interstate. 1994.

National FFA Organization. FFA Proficiency Award and Degree Software. Alexandria, VA: Author. Current edition.

Stewart, B. et al. Agricultural Business Sales and Marketing. Columbia, MO: Instructional Materials Laboratory, University of Missouri.

Stewart, J. and Jobes, R. Farm and Ranch Business Management (3rd ed.). Moline, IL: Deere and Company. 1992.

AGRICULTURE BUSINESS AND MANAGEMENT II
UNIT 2: HUMAN RELATIONS (5 days)

Competencies and Suggested Objectives:

1. Describe the importance of human relations skills.
   a. Identify positive personality traits.
   b. Demonstrate positive personality traits.
   c. Utilize human relation skills throughout the course.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6
2. Distinguish between an agribusiness employee's success and failure as a result of human relations skills.
   a. Identify skills and personality traits which determine success and failure.
   b. Demonstrate personality traits which determine success and failure.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6

Suggested Teaching Strategies:

1. *Describe the importance of human relations skills.*
   a. Use personality profiles, media, and human resources specialist to study positive personality traits.
   b. Demonstrate positive personality traits through conduct of FFA meetings, conferences, and media.
   c. Assist students to utilize human relation skills throughout the course.
2. *Distinguish between an agribusiness employee's success and failure as a result of human relations skills.*
   a. Use personality profiles, media, and human resources specialist to study positive personality traits.
   b. Demonstrate positive personality traits through conduct of FFA meetings, conferences, and media.

Suggested Assessment Strategies:

1. *Describe the importance of human relations skills.*
   a. Test - Identify positive personality traits.
   b. Assignment - Demonstrate positive personality traits.
   c. Assignment - Utilize human relation skills throughout the course.

2. *Distinguish between an agribusiness employee's success and failure as a result of human relations skills.*
   a. *Test - Identify skills and personality traits which determine success and failure.*
   b. *Assignment - Demonstrate personality traits which determine success and failure.*

Suggested References:

Instructional Materials Service. Personal Skill Development in Agriculture: Agriscience 312. (Catalog #8746). College Station, TX: Texas A&M.

Reeder, D. Vocational Agriculture IV. Stillwater, OK: Department of Vocational and Technical Education. 1979.

Stewart, B. et al. Agricultural Business Sales and Marketing. Columbia, MO: Instructional Materials Laboratory, University of Missouri.

AGRICULTURE BUSINESS AND MANAGEMENT II
UNIT 3: AGRICULTURAL COMMUNICATIONS (15 days)

Competencies and Suggested Objectives:

1. Analyze components of the skills of listening and answering questions.
   a. Describe the components of listening and answering questions.
   b. Demonstrate skills in listening and answering questions.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP6
2. Apply acceptable procedures for answering business telephones and taking messages in an agribusiness setting.
   a. Identify acceptable procedures for answering business telephones and taking messages.
   b. Demonstrate acceptable procedures for answering business telephones and taking messages.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP6
3. Apply the proper elements in developing a business letter.
   a. Identify the proper elements in developing a business letter.
   b. Write a business letter.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP6
4. Prepare a resume and an employment application form.
   a. Describe the components of a resume and an employment application form.
   b. Prepare a resume and an application form using a word processor.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP6
5. Prepare and present a 3-5 minute presentation related to an agribusiness topic.
   a. Describe the parts of a speech.
   b. Develop a speech outline and prepare a 3-5 minute presentation related to an agribusiness topic.
   c. Present a 3-5 minute presentation related to an agribusiness topic.

Related Academic Topics (See Appendix A):
C1, C2, C3, C4, C5, C6
Workplace Skills (See Appendix B):
WP1, WP2, WP3, WP5, WP6

Suggested Teaching Strategies:

1. *Analyze components of the skills of listening and answering questions.*
   a. *Discussion and demonstration of components of listening and answering questions.*
   b. *Role playing of listening and answering questions.*
2. *Apply acceptable procedures for answering business telephones and taking messages in an agribusiness setting.*
   a. *Discussion and demonstration of procedures for answering business telephones and taking messages.*
   b. *Performance exercises of procedures for answering business telephones and taking messages.*
3. *Apply the proper elements in developing a business letter.*
   a. *Discussion regarding elements in developing a business letter.*
   b. *Performance exercise to write a business letter.*
4. *Prepare a resume and an employment application form.*
   a. *Discussion regarding the components of a resume and an employment application form.*
   b. *Practical exercise to prepare a resume and an application form using a word processor.*
5. *Prepare and present a 3-5 minute presentation related to an agribusiness topic.*
   a. *Discussion and media regarding the parts of a speech.*
   b. *Prepare a speech outline and a 3-5 minute presentation related to an agribusiness topic.*
   c. *Performance exercise to present a 3-5 minute presentation related to an agribusiness topic. Participate in the FFA contest and awards program.*

Suggested Assessment Strategies:

1. *Analyze components of the skills of listening and answering questions.*
   a. *Test - Describe the components of listening and answering questions.*
   b. *Assignment - Demonstrate skills in listening and answering questions.*
2. *Apply acceptable procedures for answering business telephones and taking messages in an agribusiness setting.*
   a. *Test - Identify acceptable procedures for answering business telephones and taking messages.*
   b. *Performance Activity - Demonstrate acceptable procedures for answering business telephones and taking messages.*

3. *Apply the proper elements in developing a business letter.*
   a. *Test - Identify the proper elements in developing a business letter.*
   b. *Performance Activity - Write a business letter.*
4. *Prepare a resume and an employment application form.*
   a. *Test - Describe the components of a resume and an employment application form.*
   b. *Performance Activity - Prepare a resume and an application form using a word processor.*
5. *Prepare and present a 3-5 minute presentation related to an agribusiness topic.*
   a. *Test - Describe the parts of a speech.*
   b. *Assignment - Develop a speech outline and prepare a 3-5 minute presentation related to an agribusiness topic.*
   c. *Performance Activity - Present a 3-5 minute presentation related to an agribusiness topic.*

Suggested References:

Instructional Materials Service. Personal Skill Development in Agriculture: Agriscience 312. (Catalog #8746). College Station, TX: Texas A&M.

Reeder, D. Vocational Agriculture IV. Stillwater, OK: Oklahoma State Department of Vocational and Technical Education. 1979.

Stewart, B. et al. Agricultural Business Sales and Marketing. Columbia, MO: Instructional Materials Laboratory, University of Missouri.

AGRICULTURE BUSINESS AND MANAGEMENT II
UNIT 4: AGRICULTURAL SALESMANSHIP **(10 days)**

Competencies and Suggested Objectives:

1. Apply different approaches to the potential customer.
   a. Describe various approaches to the potential customer.
   b. Demonstrate various approaches to the potential customer.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6
2. Demonstrate a sales presentation of agribusiness supplies and/or products.
   a. Describe the steps to give a sales presentation of agribusiness supplies and/or products.
   b. Give a sales presentation of agribusiness supplies and/or products.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6
3. Practice procedures for overcoming customer resistance.
   a. Determine ways to overcome customer resistance.
   b. Demonstrate procedures for overcoming customer resistance.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6
4. Apply procedures for closing a sale.
   a. Explain the procedures to close a sale.
   b. Demonstrate procedures for closing a sale.
   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6

Suggested Teaching Strategies:

1. *Apply different approaches to the potential customer.*
   a. Discussion regarding approaches to the potential customer.
   b. Role play various approaches to the potential customer.
2. *Demonstrate a sales presentation of agribusiness supplies and/or products.*
   a. Discussion and media of the steps to give a sales presentation of agribusiness supplies and/or products.

b. Performance exercise of a sales presentation of agribusiness supplies and/or products.

3. *Practice procedures for overcoming customer resistance.*
   a. *Report of ways to overcome customer resistance.*
   b. *Performance exercise of procedures for overcoming customer resistance.*
4. *Apply procedures for closing a sale.*
   a. *Discussion and media of the procedures to close a sale.*
   b. *Performance exercise of procedures for closing a sale.*

Suggested Assessment Strategies:

1. *Apply different approaches to the potential customer.*
   a. *Test - Describe various approaches to the potential customer.*
   b. *Performance Activity - Demonstrate various approaches to the potential customer.*
2. *Demonstrate a sales presentation of agribusiness supplies and/or products.*
   a. *Test - Describe the steps to give a sales presentation of agribusiness supplies and/or products.*
   b. *Performance Activity - Give a sales presentation of agribusiness supplies and/or products.*
3. *Practice procedures for overcoming customer resistance.*
   a. *Assignment - Determine ways to overcome customer resistance.*
   b. *Performance Activity - Demonstrate procedures for overcoming customer resistance.*
4. *Apply procedures for closing a sale.*
   a. *Test - Explain the procedures to close a sale.*
   b. *Performance Activity - Demonstrate procedures for closing a sale.*

Suggested References:

Lee, J. et al. Agricultural Marketing. Danville, IL: The Interstate Printers and Publishers. 1994.

Stewart, B. et al. Agricultural Business Sales and Marketing. Columbia, MO: Instructional Materials Laboratory, University of Missouri.

AGRICULTURE BUSINESS AND MANAGEMENT II
UNIT 5: AGRICULTURAL BUSINESS PROCEDURES (10 days)

Competencies and Suggested Objectives:

1. Apply procedures for making customer transactions.
   a. Identify different business procedures which are used in customer transactions.
   b. Demonstrate procedures for making customer transactions.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6
2. Describe how inventory is managed and how the selling price of merchandise is determined.
   a. Describe how inventory is managed and how the selling price of merchandise is determined including physical replacement, labor, freight charges, wholesale costs, overhead, and loss/waste.
   b. Prepare an inventory by using a computer spreadsheet.

   Related Academic Topics (See Appendix A):
   C1, C2, C5
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP4
3. Utilize business machines.
   a. Describe the function of business machines in agribusiness.
   b. Demonstrate use of business machines including calculators, cash registers, and computers.

   Related Academic Topics (See Appendix A):
   C1, C2, C5
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6

Suggested Teaching Strategies:

1. *Apply procedures for making customer transactions.*
   a. Discussion and media of business procedures which are used in customer transactions.
   b. Performance exercise of procedures for making customer transactions.

2. *Describe how inventory is managed and how the selling price of merchandise is determined.*
   a. *Use agricultural planning project to demonstrate how inventory is managed and how the selling price of merchandise is determined including physical replacement, labor, freight charges, wholesale costs, overhead, and loss/waste.*
   b. *Performance exercise to develop an inventory by using a computer spreadsheet and ASIS.*
3. *Utilize business machines.*
   a. *Discussion and media of function of business machines in agribusiness.*
   b. *Performance exercise to use business machines including calculators, cash registers, and computers in agricultural planning project and SAE.*

Suggested Assessment Strategies:

1. *Apply procedures for making customer transactions.*
   a. *Test - Identify different business procedures which are used in customer transactions.*
   b. *Performance Activity - Demonstrate procedures for making customer transactions.*
2. *Describe how inventory is managed and how the selling price of merchandise is determined.*
   a. *Assignment - Describe how inventory is managed and how the selling price of merchandise is determined including physical replacement, labor, freight charges, wholesale costs, overhead, and loss/waste.*
   b. *Performance Activity - Prepare an inventory by using a computer spreadsheet.*
3. *Utilize business machines.*
   a. *Test - Describe the function of business machines in agribusiness.*
   b. *Performance Activity - Demonstrate use of business machines including calculators, cash registers, and computers.*

Suggested References:

Dictation Disc Company. Computer Applications for Business. New York, NY: Author. 1990.

Instructional Materials Service. Entrepreneurship in Agriculture: Agriscience 313. (Catalog #8762). College Station, TX: Texas A&M.

Luening, R. et al. The Farm Management Handbook (7th ed.). Danville, IL: Interstate. 1991.

National Council for Agricultural Education. Decisions and Dollars. Alexandria, VA: Author. 1995.

Newman, M. and Wills, W. Agribusiness Management and Entrepreneurship (3rd ed.). Danville, IL: Interstate Printers and Publishers. 1994.

Stewart, B. et al. Agricultural Business Sales and Marketing. Columbia, MO: Instructional Materials Laboratory, University of Missouri.

AGRICULTURE BUSINESS AND MANAGEMENT II
UNIT 6: AGRICULTURAL ADVERTISING AND DISPLAY (20 days)

Competencies and Suggested Objectives:

1. Explain methods of agricultural promotions.
   a. Describe methods of promotions as related to agriculture including advertisements, displays, radio, ASIS, and television.
   b. Identify agricultural promotions being used in advertisements, displays, radio, and television in the community.

   Related Academic Topics (See Appendix A):
   C1, C2, C4, C6

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6
2. Explain how advertising is used in agribusiness.
   a. Describe how advertising is used in agribusiness including source of information, to persuade, and to remind.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6
3. Explain types of advertising media used by agribusiness including newspapers, television, display, magazines, and flyers.
   a. Describe types of advertising media used by agribusiness including newspapers, television, display, magazines, and flyers.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6
4. Design and prepare an agribusiness display and advertisement.
   a. Describe the components in designing and preparing an agribusiness advertisement.
   b. Design and prepare an agribusiness display and advertisement.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C6

   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP4, WP6

Suggested Teaching Strategies:

1. *Explain methods of agricultural promotions.*
   a. *Discussion and media on methods of promotions as related to agriculture including advertisements, displays, radio, ASIS, and television.*

   b. *Oral report of agricultural promotions being used in advertisements, displays, radio, and television.*
2. *Explain how advertising is used in agribusiness.*
   a. *Discussion and media on how advertising is used in agribusiness including source of information, to persuade, and to remind.*
3. *Explain types of advertising media used by agribusiness including newspapers, television, display, magazines, and flyers.*
   a. *Written report of types of advertising media used by agribusiness including newspapers, television, display, magazines, and flyers.*
4. *Design and prepare an agribusiness display and advertisement.*
   a. *Written report of the components in designing and preparing an agribusiness advertisement.*
   b. *Performance exercise in agricultural planning project and SAE Program to design and prepare an agribusiness display and advertisement.*

Suggested Assessment Strategies:

1. *Explain methods of agricultural promotions.*
   a. *Test - Describe methods of promotions as related to agriculture including advertisements, displays, radio, ASIS, and television.*
   b. *Assignment - Identify agricultural promotions being used in advertisements, displays, radio, and television.*
2. *Explain how advertising is used in agribusiness.*
   a. *Test - Describe how advertising is used in agribusiness including source of information, to persuade, and to remind.*
3. *Explain types of advertising media used by agribusiness including newspapers, television, display, magazines, and flyers.*
   a. *Test - Describe types of advertising media used by agribusiness including newspapers, television, display, magazines, and flyers.*
4. *Design and prepare an agribusiness display and advertisement.*
   a. *Test - Describe the components in designing and preparing an agribusiness advertisement.*
   b. *Performance Activity - Design and prepare an agribusiness display and advertisement.*

Suggested References:

Lee, J. et al. Agricultural Marketing. Danville, IL: Interstate. 1994.

Smith, M. et al. Careers in Agribusiness and Industry (4th ed.). Danville, IL: Interstate. 1991.

Stewart, B. et al. Agricultural Business Sales and Marketing. Columbia, MO: Instructional Materials Laboratory, University of Missouri.

AGRICULTURE BUSINESS AND MANAGEMENT II
UNIT 7: TAXES, INSURANCE, AND BUSINESS LAW (20 days)

Competencies and Suggested Objectives:

1. Prepare tax forms.
   a. Describe the forms and elements of preparation for income tax forms.
   b. Complete tax returns.

   Related Academic Topics (See Appendix A):
   C1, C2, C4, C6
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
2. Explain the responsibilities of the agribusiness employer concerning social security.
   a. Describe types of social security benefits.
   b. Identify responsibilities of the agribusiness employer concerning social security.

   Related Academic Topics (See Appendix A):
   C1, C2, C5
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
3. Explain the kinds of insurance with coverage needed in an individual operation.
   a. Compare the common kinds of insurance and coverages including life, property, health, and liability.
   b. Determine the insurance needs of an individual operator including life, property, health, and liability.

   Related Academic Topics (See Appendix A):
   C1, C2, C5
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP6
4. Explain the essential elements of a contract and associate laws and other regulations affecting agribusiness activities.
   a. Identify the essential elements of a contract including offer and acceptance, consideration, legal parties, and unlawful practices.
   b. Associate laws and regulations affecting agribusiness activities including negligence, workman's compensation, estate planning, and other regulations.

Related Academic Topics (See Appendix A):
C1, C2, C5
M1, M7
Workplace Skills (See Appendix B):
WP1, WP2, WP4, WP6

Suggested Teaching Strategies:

1. *Prepare tax forms.*
   a. *Discussion and media on the forms and elements of preparation for income tax forms.*
   b. *Performance exercise to complete tax returns in agricultural planning project and SAE Program.*
2. *Explain the responsibilities of the agribusiness employer concerning social security.*
   a. *Discussion and media regarding types of social security benefits.*
   b. *Written report of responsibilities of the agribusiness employer concerning social security.*
3. *Explain the kinds of insurance with coverage needed in an individual operation.*
   a. *Written report to compare the common kinds of insurance and coverages including life, property, health, and liability.*
   b. *Performance exercise to determine the insurance needs of an individual operator including life, property, health, and liability.*
4. *Explain the essential elements of a contract and associate laws and other regulations affecting agribusiness activities.*
   a. *Discussion and media on the essential elements of a contract including offer and acceptance, consideration, legal parties, and unlawful practices.*
   b. *Written report to associate laws and regulations affecting agribusiness activities including negligence, workman's compensation, estate planning, and other regulations.*

Suggested Assessment Strategies:

1. *Prepare tax forms.*
   a. *Test - Describe the forms and elements of preparation for income tax forms.*
   b. *Performance Activity - Complete tax returns.*
2. *Explain the responsibilities of the agribusiness employer concerning social security.*
   a. *Test - Describe types of social security benefits.*
   b. *Assignment - Identify responsibilities of the agribusiness employer concerning social security.*

3. *Explain the kinds of insurance with coverage needed in an individual operation.*
   a. *Assignment - Compare the common kinds of insurance and coverages including life, property, health, and liability.*
   b. *Performance Activity - Determine the insurance needs of an individual operator including life, property, health, and liability.*
4. *Explain the essential elements of a contract and associate laws and other regulations affecting agribusiness activities.*
   a. *Test - Identify the essential elements of a contract including offer and acceptance, consideration, legal parties, and unlawful practices.*
   b. *Assignment - Associate laws and regulations affecting agribusiness activities including negligence, workman's compensation, estate planning, and other regulations.*

Suggested References:

Kay, R. D. and Edwards, W. Farm Management (3rd ed.). New York, NY: McGraw-Hill. 1994.

Instructional Materials Service. Agribusiness Management and Marketing: Agriscience 311. Catalog #8720. College Station, TX: Texas A&M University.

Luening, R. et al. The Farm Management Handbook (7th ed.). Danville, IL: Interstate. 1991.

National Council for Agricultural Education. Decisions and Dollars. Alexandria, VA: Author. 1995.

Stewart, J. and Jobes, R. Farm and Ranch Business Management (3rd ed.). Moline, IL: Deere and Company. 1992.

AGRICULTURE BUSINESS AND MANAGEMENT II
UNIT 8: AGRICULTURAL MARKETING (10 days)

Competencies and Suggested Objectives:

1. Explain general uses of futures contracts in marketing agricultural products, crops, and livestock.
   a. Describe the function of a futures contract.
   b. Describe the function of a futures contract option.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP5, WP6
2. Apply ASIS in explaining how futures contract prices related to cash market prices.
   a. Define the relationship between cash and futures prices (basis).
   b. Track the price fluctuations for a particular commodity through a six-week period, futures prices vs. cash prices.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP4, WP5, WP6

Suggested Teaching Strategies:

1. *Explain general uses of futures contracts in marketing agricultural products, crops, and livestock.*
   a. *Discussion, guest speaker on commodities, and media regarding the function of a futures contract.*
   b. *Discussion and media regarding the function of a futures contract option.*
2. *Apply ASIS in explaining how futures contract prices relate to cash market prices.*
   a. *Use ASIS to establish the relationship between cash and futures prices (basis).*
   b. *Performance exercise to track the price fluctuations for a particular commodity through a six-week period, futures prices vs. cash prices.*

Suggested Assessment Strategies:

1. *Explain general uses of futures contracts in marketing agricultural products, crops, and livestock.*
   a. *Test - Describe the function of a futures contract.*
   b. *Test - Describe the function of a futures contract option.*
2. *Apply ASIS in explaining how futures contract prices relate to cash market prices.*
   a. *Test - Define the relationship between cash and futures prices (basis).*
   b. *Performance Activity - Track the price fluctuations for a particular commodity through a six-week period, futures prices vs. cash prices.*

Suggested References:

Chicago Board of Trade. Commodity Trading Manual. Chicago, IL: Author. 1994.

Instructional Materials Service. Agribusiness Management and Marketing: Agriscience 311. (Catalog #8720). College Station, TX: Texas A&M.

Lee, J. et al. Agricultural Marketing. Danville, IL: Interstate. 1994.

Luening, R. et al. The Farm Management Handbook (7th ed.). Danville, IL: Interstate. 1991.

National Council for Agricultural Education. Decisions and Dollars. Alexandria, VA: Author. 1995.

Stewart, J. and Jobes, R. Farm and Ranch Business Management (3rd ed.). 1992. Moline, IL: Deere and Company.

AGRICULTURE BUSINESS AND MANAGEMENT II
UNIT 9: FACILITIES AND EQUIPMENT MAINTENANCE AND REPAIR (30 days)

Competencies and Suggested Objectives:

1. Apply proper safety procedures.
   a. Describe proper safety procedures with hand tools, power tools, and equipment.
   b. Demonstrate proper safety procedures with hand tools, power tools, and equipment.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP5, WP6
2. Apply procedures of welding with electric arc and oxyacetylene welding equipment.
   a. Identify and/or construct various welds using electric arc welding equipment.
   b. Identify and/or construct various welds using oxyacetylene welding equipment.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP5, WP6
3. Apply procedures to service and troubleshoot small gasoline engines.
   a. Describe procedures to service and troubleshoot a small gasoline engine.
   b. Demonstrate procedures to service and troubleshoot small gasoline engines.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP5, WP6
4. Apply procedures to make electrical repairs.
   a. Describe procedures to make electrical repairs.
   b. Demonstrate procedures to make electrical repairs.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP5, WP6

5. Apply procedures to make plumbing repairs.
   a. Describe the procedures to make plumbing repairs.
   b. Demonstrate the procedures to make plumbing repairs.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP5, WP6
6. Apply procedures to make structural repairs.
   a. Describe the procedures to make structural repairs.
   b. Demonstrate the procedures to make structural repairs.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4
   M1, M7

   Workplace Skills (See Appendix B):
   WP1, WP2, WP5, WP6

Suggested Teaching Strategies:

1. *Apply proper safety procedures.*
   a. *Discussion and media regarding safety procedures with hand tools, power tools, and equipment.*
   b. *Performance exercise to apply proper safety procedures with hand tools, power tools, and equipment.*
2. *Apply procedures of welding with electric arc and oxyacetylene welding equipment.*
   a. *Performance exercise to construct various welds using electric arc welding equipment.*
   b. *Performance exercise to construct various welds using oxyacetylene welding equipment.*
3. *Apply procedures to service and troubleshoot small gasoline engines.*
   a. *Discussion and media regarding procedures to service and troubleshoot a small gasoline engine.*
   b. *Performance exercise of procedures to service and troubleshoot small gasoline engines.*
4. *Apply procedures to make electrical repairs.*
   a. *Discussion and media regarding procedures to make electrical repairs.*
   b. *Performance exercise of the procedures to make electrical repairs.*
5. *Apply procedures to make plumbing repairs.*
   a. *Discussion and media regarding procedures to make plumbing repairs.*
   b. *Performance exercise of the procedures to make plumbing repairs.*
6. *Apply procedures to make structural repairs.*
   a. *Discussion and media of the procedures to make structural repairs.*
   b. *Performance exercise of the procedures to make structural repairs.*

Suggested Assessment Strategies:

1. *Apply proper safety procedures.*
   a. *Test - Describe proper safety procedures with hand tools, power tools, and equipment.*
   b. *Performance Activity - Demonstrate proper safety procedures with hand tools, power tools, and equipment.*
2. *Apply procedures of welding with electric arc and oxyacetylene welding equipment.*
   a. *Performance Activity - Identify and/or construct various welds using electric arc welding equipment.*
   b. *Performance Activity - Identify and/or construct various welds using oxyacetylene welding equipment.*
3. *Apply procedures to service and troubleshoot small gasoline engines.*
   a. *Test - Describe procedures to service and troubleshoot a small gasoline engine.*
   b. *Performance Activity - Demonstrate procedures to service and troubleshoot small gasoline engines.*
4. *Apply procedures to make electrical repairs.*
   a. *Test - Describe procedures to make electrical repairs.*
   b. *Performance Activity - Demonstrate procedures to make electrical repairs.*
5. *Apply procedures to make plumbing repairs.*
   a. *Test - Describe the procedures to make plumbing repairs.*
   b. *Performance Activity - Demonstrate the procedures to make plumbing repairs.*
6. *Apply procedures to make structural repairs.*
   a. *Test - Describe the procedures to make structural repairs.*
   b. *Performance Activity - Demonstrate the procedures to make structural repairs.*

Suggested References:

Briggs and Stratton. Service and Repair Instructions: Single Cylinder 4-Cycle Engines. Milwaukee, WI: Author. 1995.

Burke, Stanley and Wakeman T. J. Modern Agricultural Mechanics. Danville, IL: Interstate. 1992.

Cooper, E. L. Agricultural Mechanics: Fundamentals and Applications (2nd ed.). Albany NY: Delmar. 1991.

Deere & Co. Fundamentals of Service - Compact Equipment: Engines. Moline, IL: Author. 1983.

Harp, K. and Stewart, J. Vocational Agriculture II. Stillwater, OK: Oklahoma State Department of Vocational and Technical Education. 1985.

Instructional Materials Service. Home Maintenance and Improvement: Agriscience 222. (Catalog #8627). College Station, TX: Texas A&M.

Parady, H. and Turner, H. Tractor Maintenance - Principles and Procedures. Athens, GA: AAVIM. 1975.

Reeder, Dean. Vocational Agriculture IV. Stillwater, OK: Oklahoma State Department of Vocational and Technical Education. 1979.

Turner, H. Safe Tractor Operation and Daily Care. Athens, GA: AAVIM. 1975.

AGRICULTURE BUSINESS AND MANAGEMENT II
UNIT 10: PROPERTY ACQUISITION **(10 days)**

Competencies and Suggested Objectives:

1. Explain the approaches to acquiring property.
   a. Identify the approaches to acquiring property including inheritance, purchasing, and leasing.
   b. Describe the approaches to acquiring property including inheritance, purchasing, and leasing.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP6
2. Explain the factors to consider in lease agreements.
   a. Identify the factors to consider in lease agreements.
   b. Describe the factors to consider in lease agreements including crop-share and cash lease.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP6
3. Explain the system used in establishing the legal description of land.
   a. Describe the system used to establish the legal description of land.
   b. Interpret the legal description of a tract of land including section, township, and range.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP6
4. Utilize concepts of land surveying.
   a. Identify the principles of land surveying.
   b. Demonstrate land surveying by running lines according to a land description.

   Related Academic Topics (See Appendix A):
   C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B):
   WP1, WP2, WP3, WP6

Suggested Teaching Strategies:

1. *Explain the approaches to acquiring property.*
   a. *Discussion with resource person on land surveying to analyze the approaches to acquiring property including inheritance, purchasing, and leasing.*
   b. *Written report on the approaches to acquiring property including inheritance, purchasing, and leasing.*
2. *Explain the factors to consider in lease agreements.*
   a. *Oral report of the factors to consider in lease agreements.*
   b. *Written report of the factors to consider in lease agreements including crop-share and cash lease.*
3. *Explain the system used in establishing the legal description of land.*
   a. *Written report on the system used to establish the legal description of land based upon field trip to courthouse.*
   b. *Practical exercise to interpret the legal description of a tract of land including section, township, and range.*
4. *Utilize concepts of land surveying.*
   a. *Discussion and discussion with resource person on the principles of land surveying.*
   b. *Performance exercise on land surveying by running lines according to a land description in agricultural planning project and SAE.*

Suggested Assessment Strategies:

1. *Explain the approaches to acquiring property.*
   a. *Test - Identify the approaches to acquiring property including inheritance, purchasing, and leasing.*
   b. *Assignment - Describe the approaches to acquiring property including inheritance, purchasing, and leasing.*
2. *Explain the factors to consider in lease agreements.*
   a. *Assignment - Identify the factors to consider in lease agreements.*
   b. *Test - Describe the factors to consider in lease agreements including crop-share and cash lease.*
3. *Explain the system used in establishing the legal description of land.*
   a. *Assignment - Describe the system used to establish the legal description of land.*
   b. *Assignment - Interpret the legal description of a tract of land including section, township, and range.*
4. *Utilize concepts of land surveying.*
   a. *Assignment - Identify the principles of land surveying.*
   b. *Performance Activity - Demonstrate land surveying by running lines according to a land description.*

Suggested References:

National Council for Agricultural Education. Decisions and Dollars. Alexandria, VA: Author. 1995.

SECTION III:

RECOMMENDED TOOLS AND EQUIPMENT

RECOMMENDED TOOLS AND EQUIPMENT FOR AGRICULTURAL BUSINESS AND MANAGEMENT (SECONDARY)

(Quantities for a class of 20 students)

1. Air compressor (1)
2. Blower/dryer, large animal (1)
3. Briggs & Stratton engine, 3-5 hp, horizontal shaft (6)
4. Briggs & Stratton tool kits (3)
5. Calculator, w/tape (3)
6. Cash register (1)
7. Cement mixer (1)
8. Circular saw, 7 1/2" (1)
9. Clippers, large animal (1)
10. Combination wrenches (SAE set)
11. Combination wrenches (Metric set)
12. Computer w/multimedia kit and modem (10)
13. Eye protection & sterilization chest (1)
14. Flaring tool (1)
15. Gloves, work (12 pr.)
16. Greenhouse (Business and Plant Science) 25'x50' (Optional) (1)
17. Greenhouse - sprayer, 3 gal. (1)
18. Greenhouse - thermometer, high/low
19. Greenhouse -probe, moisture (1)
20. Greenhouse - plant flats (100)
21. Greenhouse - Irrigation system, fans, heaters, and drip pad (w/greenhouse) (1)
22. Greenhouse - chipper/shredder (1)
23. Greenhouse - shade cloth (1)
24. Greenhouse - plant bench (10)
25. Hacksaw (2)
26. Hammer, claw (2)
27. Hand saw, combination (2)
28. Jig saw (2)
29. Metal punches, set (1)
30. Metal chisels, set (1)
31. Meter, pH (1)
32. Pliers, lineman (2)
33. Pliers, vise grip (2)
34. Pneumatic ratchets and sockets, set (1)
35. Printer (Bubblejet) w/cables and switches (4)
36. Respirator (2)
37. Safety kit (OSHA approved) (1)
38. Sander, belt (1)

39. Small engine stand (6)
40. Socket set (Metric 3/8" drive) (2)
41. Socket set (SAE 3/8" drive) (2)
42. String trimmer (weedeater) (1)
43. Tiller, 8hp (1)
44. Transit level w/tripod and leveling rod (1)
45. Tubing bender (1)
46. Tubing cutter (1)
47. Volt-Ohmmeter (1)
48. Wheel barrow, 6 cu ft (1)
49. Wheel barrow, brick (1)
50. Wire stripper (2)

SUGGESTED INSTRUCTIONAL AIDS
FOR
AGRICULTURAL BUSINESS AND MANAGEMENT (SECONDARY)

1. Agricultural Satellite Information System (ASIS) (1)
2. Camcorder w/tripod and carrying case (1)
3. Cart, AV (for TV-VCR) (1)
4. Cart, AV (for overhead projector) (1)
5. Computer LCD display panel (to show computer files on overhead projector) (1)
6. Digital camera, compatible with microcomputer video system (1)
7. Display easel (1)
8. Micro video system (1)
9. Overhead projector (high intensity for use with LCD panel) (1)
10. Phone service for Internet connection (1)
11. Slide projector (1)
12. TV-VCR (1)
13. Video out (Microcomputer to TV monitor) (1)

APPENDIX A:

RELATED ACADEMIC TOPICS

APPENDIX A

RELATED ACADEMIC TOPICS FOR COMMUNICATIONS

C1 Interpret written material.
C2 Interpret visual materials (maps, charts, graphs, tables, etc.).
C3 Listen, comprehend, and take appropriate actions.
C4 Access, organize, and evaluate information.
C5 Use written and/or oral language skills to work cooperatively to solve problems, make decisions, take actions, and reach agreement.
C6 Communicate ideas and information effectively using various oral and written forms for a variety of audiences and purposes.

EXPANDED TOPICS FOR COMMUNICATIONS

TOPIC C1: Interpret written material.

C1.01 Read and follow complex written directions.
C1.02 Recognize common words and meanings associated with a variety of occupations.
C1.03 Adjust reading strategy to purpose and type of reading.
C1.04 Use sections of books and reference sources to obtain information.
C1.05 Compare information from multiple sources and check validity.
C1.06 Interpret items and abbreviations used in multiple forms.
C1.07 Interpret short notes, memos, and letters.
C1.08 Comprehend technical words and concepts.
C1.09 Use various reading techniques depending on purpose for reading.
C1.10 Find, read, understand, and use information from printed matter or electronic sources.

TOPIC C2: Interpret visual materials (maps, charts, graphs, tables, etc.).

C2.01 Use visuals in written and in oral presentations.
C2.02 Recognize visual cues to meaning (layout, typography, etc.).
C2.03 Interpret and apply information using visual materials.

TOPIC C3: Listen, comprehend, and take appropriate action.

C3.01 Identify and evaluate orally-presented messages according to purpose.
C3.02 Recognize barriers to effective listening.
C3.03 Recognize how voice inflection changes meaning.
C3.04 Identify speaker signals requiring a response and respond accordingly.
C3.05 Listen attentively and take accurate notes.
C3.06 Use telephone to receive information.

C3.07 Analyze and distinguish information from formal and informal oral presentations.

TOPIC C4: Access, organize, and evaluate information.

C4.01 Distinguish fact from opinion.
C4.02 Use various print and non-print sources for specialized information.
C4.03 Interpret and distinguish between literal and figurative meaning.
C4.04 Interpret written or oral communication in relation to context and writer's point of view.
C4.05 Use relevant sources to gather information for written or oral communication.

TOPIC C5: Use written and/or oral language skills to work cooperatively to solve problems, make decisions, take actions, and reach agreement.

C5.01 Select appropriate words for communication needs.
C5.02 Use reading, writing, listening, and speaking skills to solve problems.
C5.03 Compose inquiries and requests.
C5.04 Write persuasive letters and memos.
C5.05 Edit written reports, letters, memos, and short notes for clarity, correct grammar, and effective sentences.
C5.06 Write logical and understandable statements, phrases, or sentences for filling out forms, for correspondence or reports.
C5.07 Write directions or summaries of processes, mechanisms, events, or concepts.
C5.08 Select and use appropriate formats for presenting reports.
C5.09 Convey information to audiences in writing.
C5.10 Compose technical reports and correspondence that meet accepted standards for written communications.

TOPIC C6: Communicate ideas and information using oral and written forms for a variety of audiences and purposes.

C6.01 Give complex oral instructions.
C6.02 Describe a business or industrial process/mechanism.
C6.03 Participate effectively in group discussions and decision making.
C6.04 Produce effective oral messages utilizing different media.
C6.05 Explore ideas orally with partners.
C6.06 Participate in conversations by volunteering information when appropriate and asking relevant questions when appropriate.
C6.07 Restate or paraphrase a conversation to confirm one's own understanding.
C6.08 Gather and provide information utilizing different media.

C6.09 Prepare and deliver persuasive, descriptive, and demonstrative oral presentations.

RELATED ACADEMIC TOPICS FOR MATHEMATICS

M1 Relate number relationships, number systems, and number theory.
M2 Explore patterns and functions.
M3 Explore algebraic concepts and processes.
M4 Explore the concepts of measurement.
M5 Explore the geometry of one-, two-, and three-dimensions.
M6 Explore concepts of statistics and probability in real world situations.
M7 Apply mathematical methods, concepts, and properties to solve a variety of real-world problems.

EXPANDED TOPICS FOR MATHEMATICS

TOPIC M1: Relate number relationships, number systems, and number theory.

M1.01 Understand, represent, and use numbers in a variety of equivalent forms (integer, fraction, decimal, percent, exponential, and scientific notation) in real world and mathematical problem situations.
M1.02 Develop number sense for whole numbers, fractions, decimals, integers, and rational numbers.
M1.03 Understand and apply ratios, proportions, and percents in a wide variety of situations.
M1.04 Investigate relationships among fractions, decimals, and percents.
M1.05 Compute with whole numbers, fractions, decimals, integers, and rational numbers.
M1.06 Develop, analyze, and explain procedures for computation and techniques for estimations.
M1.07 Select and use an appropriate method for computing from among mental arithmetic, paper-and-pencil, calculator, and computer methods.
M1.08 Use computation, estimation, and proportions to solve problems.
M1.09 Use estimation to check the reasonableness of results.

TOPIC M2: Explore patterns and functions.

M2.01 Describe, extend, analyze, and create a wide variety of patterns.
M2.02 Describe and represent relationships with tables, graphs, and rules.
M2.03 Analyze functional relationships to explain how a change in one quantity results in a change in another.
M2.04 Use patterns and functions to represent and solve problems.
M2.05 Explore problems and describe results using graphical, numerical, physical, algebraic, and verbal mathematical models or representations.

M2.06 Use a mathematical idea to further their understanding of other mathematical ideas.
M2.07 Apply mathematical thinking and modeling to solve problems that arise in other disciplines, such as art, music, and business.

TOPIC M3: Explore algebraic concepts and processes.

M3.01 Represent situations and explore the interrelationships of number patterns with tables, graphs, verbal rules, and equations.
M3.02 Analyze tables and graphs to identify properties and relationships and to interpret expressions and equations.
M3.03 Apply algebraic methods to solve a variety of real world and mathematical problems.

TOPIC M4: Explore the concepts of measurement.

M4.01 Estimate, make, and use measurements to describe and compare phenomena.
M4.02 Select appropriate units and tools to measure to the degree of accuracy required in a particular situation.
M4.03 Extend understanding of the concepts of perimeter, area, volume, angle measure, capacity, and weight and mass.
M4.04 Understand and apply reasoning processes, with special attention to spatial reasoning and reasoning with proportions and graphs.

TOPIC M5: Explore the geometry of one-, two-, and three-dimensions.

M5.01 Identify, describe, compare, and classify geometric figures.
M5.02 Visualize and represent geometric figures with special attention to developing spatial sense.
M5.03 Explore transformations of geometric figures.
M5.04 Understand and apply geometric properties and relationships.
M5.05 Classify figures in terms of congruence and similarity and apply these relationships.

TOPIC M6: Explore the concepts of statistics and probability in real world situations.

M6.01 Systematically collect, organize, and describe data.
M6.02 Construct, read, and interpret tables, charts, and graphs.
M6.03 Develop an appreciation for statistical methods as powerful means for decision making.
M6.04 Make predictions that are based on exponential or theoretical probabilities.

M6.05 Develop an appreciation for the pervasive use of probability in the real world.

TOPIC M7: Apply mathematical methods, concepts, and properties to solve a variety of real-world problems.

M7.01 Use computers and/or calculators to process information for all mathematical situations.
M7.02 Use problem-solving approaches to investigate and understand mathematical content.
M7.03 Formulate problems from situations within and outside mathematics.
M7.04 Generalize solutions and strategies to new problem situations.

RELATED ACADEMIC TOPICS FOR SCIENCE

S1 Explain the Anatomy and Physiology of the human body.
S2 Apply the basic biological principles of Plants, Viruses and Monerans, Algae, Protista, and Fungi.
S3 Relate the nine major phyla of the kingdom anomaly according to morphology, anatomy, and physiology.
S4 Explore the chemical and physical properties of the earth to include Geology, Meteorology, Oceanography, and the Hydrologic Cycle.
S5 Investigate the properties and reactions of matter to include symbols, formulas and nomenclature, chemical equations, gas laws, chemical bonding, acid-base reactions, equilibrium, oxidation-reduction, nuclear chemistry, and organic chemistry.
S6 Explore the principles and theories related to motion, mechanics, electricity, magnetism, light energy, thermal energy, wave energy, and nuclear physics.
S7 Explore the principles of genetic and molecular Biology to include the relationship between traits and patterns of inheritance, population genetics, the structure and function of DNA, and current applications of DNA technology.
S8 Apply concepts related to the scientific process and method to include safety procedures for classroom and laboratory; use and care of scientific equipment; interrelationships between science, technology and society; and effective communication of scientific results in oral, written, and graphic form.

EXPANDED TOPICS FOR SCIENCE

TOPIC S1: Explain the Anatomy and Physiology of the human body.

S1.01 Recognize common terminology and meanings.
S1.02 Explore the relationship of the cell to more complex systems within the body.

S1.03 Summarize the functional anatomy of all the major body systems.
S1.04 Relate the physiology of the major body systems to its corresponding anatomy.
S1.05 Compare and contrast disease transmission and treatment within each organ system.
S1.06 Explore the usage of medical technology as related to human organs and organ systems.
S1.07 Explain the chemical composition of body tissue.

TOPIC S2: Apply the basic biological principles of Plants, Viruses and Monerans, Algae, Protista, and Fungi.

S2.01 Identify the major types and structures of plants, viruses, monera, algae protista, and fungi.
S2.02 Explain sexual and asexual reproduction.
S2.03 Describe the ecological importance of plants as related to the environment.
S2.04 Analyze the physical chemical and behavioral process of a plant.

TOPIC S3: Relate the nine major phyla of the kingdom anomaly according to morphology, anatomy, and physiology.

S3.01 Explain the morphology, anatomy, and physiology of animals.
S3.02 Describe the characteristics, behaviors, and habitats of selected animals.

TOPIC S4: Explore the chemical and physical properties of the earth to include Geology, Meteorology, Oceanography, and the Hydrologic Cycle.

S4.01 Examine minerals and their identification, products of the rock cycle, byproducts of weathering, and the effects of erosion.
S4.02 Relate the Hydrologic Cycle to include groundwater its zones, movement, and composition; surface water systems, deposits, and runoff.
S4.03 Consider the effects of weather and climate on the environment.
S4.04 Examine the composition of seawater; wave, tides, and currents; organisms, environment, and production of food; energy, food and mineral resources of the oceans.

TOPIC S5: Investigate the properties and reactions of matter to include symbols, formulas and nomenclature, chemical equations, gas laws, chemical bonding, acid-base reactions, equilibrium, oxidation-reduction, nuclear chemistry, and organic chemistry.

S5.01 Examine the science of chemistry to include the nature of matter, symbols, formulas and nomenclature, and chemical equations.

S5.02 Identify chemical reactions including precipitation, acids-bases, and reduction-oxidation.
S5.03 Explore the fundamentals of chemical bonding and principles of equilibrium.
S5.04 Relate the behavior of gases.
S5.05 Investigate the structure, reactions, and uses of organic compounds; and investigate nuclear chemistry and radiochemistry.

TOPIC S6: Explore the principles and theories related to motion, mechanics, electricity, magnetism, light energy, thermal energy, wave energy, and nuclear physics.

S6.01 Examine fundamentals of motion of physical bodies and physical dynamics.
S6.02 Explore the concepts and relationships among work, power, and energy.
S6.03 Explore principles, characteristics, and properties of electricity, magnetism, light energy, thermal energy, and wave energy.
S6.04 Identify principles of modern physics related to nuclear physics.

TOPIC S7: Explore the principles of genetic and molecular Biology to include the relationship between traits and patterns of inheritance; population genetics, the structure and function of DNA, and current applications of DNA technology.

S7.01 Examine principles, techniques, and patterns of traits and inheritance in organisms.
S7.02 Apply the concept of population genetics to both microbial and multicellular organism.
S7.03 Identify the structure and function of DNA and the uses of DNA technology in science, industry, and society.

TOPIC S8: Apply concepts related to the scientific process and method to include safety procedures for classroom and laboratory; use and care of scientific equipment; interrelationships between science, technology and society; and effective communication of scientific results in oral, written, and graphic form.

S8.01 Apply the components of scientific processes and methods in classroom and laboratory investigations.
S8.02 Observe and practice safe procedures in the classroom and laboratory.
S8.03 Demonstrate proper use and care for scientific equipment.
S8.04 Investigate science careers, and advances in technology.
S8.05 Communicate results of scientific investigations in oral, written, and graphic form.

APPENDIX B:

WORKPLACE SKILLS

APPENDIX B
WORKPLACE SKILLS FOR THE 21ST CENTURY

WP1 Allocates resources (time, money, materials and facilities, and human resources).

WP2 Acquires, evaluates, organizes and maintains, and interprets/communicates information, including the use of computers.

WP3 Practices interpersonal skills related to careers including team member participation, teaching other people, serving clients/customers, exercising leadership, negotiation, and working with culturally diverse.

WP4 Applies systems concept including basic understanding, monitoring and correction system performance, and designing and improving systems.

WP5 Selects, applies, and maintains/troubleshoots technology.

WP6 Employs thinking skills including creative thinking, decision making, problem solving, reasoning, and knowing how to learn.

APPENDIX C:

STUDENT COMPETENCY PROFILE

STUDENT COMPETENCY PROFILE
FOR AGRICULTURE BUSINESS AND MANAGEMENT I

Student:_____

This record is intended to serve as a method of noting student achievement of the competencies in each unit. It can be duplicated for each student and serve as a cumulative record of competencies achieved in the course.

In the blank before each competency, place the date on which the student mastered the competency.

Unit 1: Introduction and Orientation

_____1. Describe vocational student organization activities that relate to and support the instructional program.
_____2. Compile information on careers in Agricultural Business and Management.
_____3. Apply leadership skills needed in the Agricultural Business and Management field.

Unit 2: Record Keeping and Planning

_____1. Apply computer skills.
_____2. Develop mathematical skills.
_____3. Apply record keeping skills.

Unit 3: Equipment Management and Safety

_____1. Apply proper safety procedures with tools, equipment, and hazardous materials.
_____2. Select and utilize proper equipment for a specific job.
_____3. Develop a bill of materials for a specific job.
_____4. Apply procedures for maintaining and storing equipment.

Unit 4: Animal Science and Management

_____1. Select proper animal for specific farm enterprise.
_____2. Develop knowledge of nutrition in livestock production.
_____3. Apply management practices for maintaining animal health.
_____4. Explain livestock reproduction.

Unit 5: Plant Science and Management

_____1. Categorize the classes of agricultural plants.
_____2. Determine plant nutrients needed for proper growth.
_____3. Describe common groups of plant pests and diseases and methods of control.

Unit 6: Conservation Practices

_____1. Describe the factors which affect soil formation.
_____2. Contrast types of soil erosion and control.
_____3. Describe point sources of pollution.

Unit 7: Structure of Agricultural Business

_____1. Describe the different types of business organizations, their advantages, and their disadvantages.
_____2. Analyze principles of a partnership agreement.

Unit 8: Marketing

_____1. Differentiate between retail and wholesale marketing.
_____2. Identify factors that affect pricing.
_____3. Utilize an Agricultural Satellite Information System (ASIS).

Unit 9: Agricultural Credit

_____1. Describe the use, advantages, and disadvantages of agricultural credit.
_____2. Determine established guidelines for credit rating and credit agreements.
_____3. Describe credit agencies and their sources of credit.

Unit 10: Budgets

_____1. Explain budgeting and determine reasons for budgeting.
_____2. Develop an enterprise budget.
_____3. Develop a strategy for using the ASIS in budgeting.

STUDENT COMPETENCY PROFILE
FOR AGRICULTURE BUSINESS AND MANAGEMENT II

Student:_____

This record is intended to serve as a method of noting student achievement of the competencies in each unit. It can be duplicated for each student and serve as a cumulative record of competencies achieved in the course.

In the blank before each competency, place the date on which the student mastered the competency.

Unit 1: Orientation

_____1. Examine the outlook for employment in the agribusiness and management field.
_____2. Apply leadership skills needed in the agribusiness and management field.

Unit 2: Human Relations

_____1. Describe the importance of human relations skills.
_____2. Distinguish between an agribusiness employee's success and failure as a result of human relations skills.

Unit 3: Agricultural Communications

_____1. Analyze components of the skills of listening and answering questions.
_____2. Apply acceptable procedures for answering business telephones and taking messages in an agribusiness setting.
_____3. Apply the proper elements in developing a business letter.
_____4. Prepare a resume and an employment application form.
_____5. Prepare and present a 3-5 minute presentation related to an agribusiness topic.

Unit 4: Agricultural Salesmanship

_____1. Apply different approaches to the potential customer.
_____2. Demonstrate a sales presentation of agribusiness supplies and/or products.
_____3. Practice procedures for overcoming customer resistance.
_____4. Apply procedures for closing a sale.

Unit 5: Agricultural Business Procedures

_____1. Apply procedures for making customer transactions.
_____2. Describe how inventory is managed and how the selling price of merchandise is determined.
_____3. Utilize business machines.

Unit 6: Agricultural Advertising and Display

_____1. Explain methods of agricultural promotions.
_____2. Explain how advertising is used in agribusiness.
_____3. Explain types of advertising media used by agribusiness including newspapers, television, display, magazines, and flyers.
_____4. Design and prepare an agribusiness display and advertisement.

Unit 7: Taxes, Insurance, and Business Law

_____1. Prepare tax forms.
_____2. Explain the responsibilities of the agribusiness employer concerning social security.
_____3. Explain the kinds of insurance with coverage needed in an individual operation.
_____4. Explain the essential elements of a contract and associate laws and other regulations affecting agribusiness activities.

Unit 8: Agricultural Marketing

_____1. Explain general uses of futures contracts in marketing agricultural products, crops, and livestock.
_____2. Apply ASIS in explaining how futures contract prices related to cash market prices.

Unit 9: Facilities and Equipment Maintenance and Repair

_____1. Apply proper safety procedures.
_____2. Apply procedures of welding with electric arc and oxyacetylene welding equipment.
_____3. Apply procedures to service and troubleshoot small gasoline engines.
_____4. Apply procedures to make electrical repairs.
_____5. Apply procedures to make plumbing repairs.
_____6. Apply procedures to make structural repairs.

Unit 10: Property Acquisition

_____1. Explain the approaches to acquiring property.
_____2. Explain the factors to consider in lease agreements.
_____3. Explain the system used in establishing the legal description of land.
_____4. Utilize concepts of land surveying.